

Let us help you find a Project!

DIY Kit Project List

Categories ARM Cortex Raspberry Pi **Android** Arduino Solar **Electrical Robotics** Humanoid **Embedded Core Electrical Sensor Based** Communication **General Electronics** Drone Non-Microcontroller **Power Electronics** Internet of Things (IOT)

> Call us from Monday to Saturday between 10 AM to 7 PM IST. Phone: +91 99591 78000, +91 99087 78000.

Edgefx Technologies

Flat No. 105, 3rd Floor, Liberty Plaza, Himayatnagar, Hyderabad - 500029, Telangana, India









Categories	Model No.	Page No.	Categories	Model No.	Page No.
Embedded, Electrical, PowerElectronics		6	Embedded, Sensor Based	47	26
Embedded, Electrical, General Electronics		17	Embedded, Sensor Based, General Electronics	48	8
Embedded, Electrical, General Electronics	3	12	Embedded, Electrical,	49	18
Embedded, Electrical, Power Electronics	6	5	Embedded, General Electronics	53	14
Embedded, Electrical, Power Electronics	7	4	Embedded, Electrical, Power Electronics	59	22
Embedded, Electrical, Power Electronics	8	9	Embedded, Communication	61	19
Embedded, Electrical, Power Electronics	9	12	Embedded, Electrical	64	15
Embedded, Electrical, Power Electronics	10	9	Embedded, Electrical, Power Electronics, Solar	66	26
Embedded, Electrical, Power Electronics	11	15	Embedded, Electrical, Communication, Sensor Based	76	21
Embedded, General Electronics	12	16	Embedded, Communication	109	10
Electrical	13	23	Embedded, Communication	144	8
Embedded, Electrical, Communication	14	6	Embedded, Communication	146	45
Embedded, Electrical, General Electronics	15	16	Embedded, Communication, Electrical, Sensor Based	147	45
Embedded, General Electronics, Sensor Based	17	39	Embedded, Communication, Electrical	148	13
Embedded, General Electronics , Sensor Based	18	20	Embedded, Communication	150	14
Embedded, Electrical, General Electronics , Sensor Based	19	10	Embedded, Communication, Robotics	151	53
Embedded, Communication	21	37	Embedded, Communication, Robotics	152	51
Embedded, Electrical, Communication	22	12	Embedded, Communication, Robotics	153	51
Embedded, Communication	23	30	Embedded, Communication	154	43
Embedded, General Electronics, Sensor Based	24	4	Embedded, Electrical, Power Electronics, Sensor Based	155	16
Embedded, Robotics	27	31	Embedded, Communication, General Electronics	156	13
General Electronics, Robotics, Sensor Based	29	6	Embedded, Sensor Based, Communication	157	42
Embedded, Electrical, Communication	30	16	Embedded, Communication, General Electronics	158	33
Embedded, Electrical, General Electronics	32	19	Embedded, Communication, Electrical	159	45
Embedded, Electrical, General Electronics	33	9	Electrical, Sensor Based	160	23
Embedded, Sensor Based	34	38	Embedded, Communication, General Electronics	161	8
Embedded, General Electronics, Sensor Based	36	7	Embedded, Sensor Based, Electrical	164	18
Embedded, Communication, Electrical, Sensor Based	40	41	Electrical	165	31
Embedded, Electrical, Power Electronics	42	20	Embedded, Communication, General Electronics	166	9

Categories		Page No.	Categories	Model No.	Page No.
Electrical, Power Electronics		4	Embedded, Electrical, Power Electronics	224	40
Electrical	168	23	General Electronics, Sensor Based	225	10
Embedded, Sensor Based, General Electronics	169	15	General Electronics, Electrical, Communication	226	25
Embedded, Communication, General Electronics	170	29	General Electronics	227	1
Embedded, Robotics, General Electronics	171	13	Embedded, Electrical, General Electronics	228	8
Embedded, Communication, General Electronics	172	18	General Electronics, Sensor Based	229	3
Electrical	173	35	Embedded, Communication, General Electronics, Sensor Based	231	46
Electrical, Power Electronics	174	5	Embedded, Sensor Based, General Electronics	232	24
Embedded, Electrical	178	7	Embedded, General Electronics	233	36
Embedded, Communication, Electrical	180	48	Embedded, General Electronics, Communication	234	10
Embedded, Sensor Based, Power Electronics	181	13	Embedded, Electrical, Power Electronics	235	38
Embedded, Sensor Based, Power Electronics	182	13	Electrical, Power Electronics	237	4
Embedded, Sensor Based, General Electronics	185	12	Embedded, Electrical, Power Electronics, Communication	238	48
Embedded, Communication, General Electronics	186	19	Embedded, Electrical, Power Electronics	240	40
General Electronics	188	2	Electrical, General Electronics	241	11
General Electronics	189	2	Embedded, General Electronics, Sensor Based	242	11
Embedded, Communication, General Electronics	190	42	Embedded, Electrical, Power Electronics	243	23
Embedded, General Electronics, Solar	192	9	Embedded, Electrical, Power Electronics	244	23
General Electronics	193	1	Embedded, Electrical, Power Electronics	245	33
Embedded, Communication, General Electronics	201	42	Embedded, Electrical, Power Electronics, Communication	246	28
Electrical, General Electronics	205	1	General Electronics, Communication	247	35
General Electronics	208	1	Embedded, Robotics, Sensor Based	249	30
Power Electronics, Electrical, Solar	213	17	Embedded, Sensor Based, Solar	250	48
General Electronics, Sensor Based	216	2	Embedded, Electrical, Power Electronics	251	22
Embedded, Electrical, Power Electronics	220	14	Embedded, Sensor Based, Robotics	253	46
General Electronics, Sensor Based	221	4	Embedded, Electrical	254	2
General Electronics	222	3	Embedded, Robotics, Communication	255	52
General Electronics	223	44	Embedded, General Electronics, Sensor Based	282	18

Categories		Page No.	Categories	Model No.	Page No.
Embedded, Electrical, Power Electronics		10	Embedded, Electrical, Communication	342	28
Embedded, Electrical, Power Electronics	290	19	Electrical, General Electronics	343	21
Embedded, General Electronics, Sensor Based	292	26	Embedded, Electrical	344	11
Embedded, General Electronics, Sensor Based	298	5	Embedded, Electrical, Communication, Sensor Based	346	46
General Electronics,	300	2	Embedded, General Electronics, Communication, Sensor Based	347	49
Embedded, General Electronics, Sensor Based	309	24	Arduino, Embedded, General Electronics, Electrical	348	29
Embedded, General Electronics, Communication	310	49	Arduino, Embedded,Solar, Electrical,	350	37
Embedded, General Electronics, Communication	311	6	Arduino, Embedded, General Electronics, Electrical	351	34
Embedded, Electrical, Communication	312	36	Arduino, Embedded,Power Electronics, Electrical	352	42
Embedded, Electrical, Communication	317	53	Embedded, General Electronics	353	30
Embedded, Electrical, Communication	322	50	STM32, Embedded, General Electronics, Electrical,	354	39
Embedded, Robotics, Communication	324	53	STM32, Embedded, General Electronics, Electrical	355	37
Embedded, Electrical, Communication	325	29	STM32, Embedded, Solar, Electrical	356	47
Embedded, Robotics, Communication	326	33	RaspberryPI, Embedded,General Electronics, Electrical	357	50
Embedded, General Electronics, Communication	327	32	RaspberryPI, Embedded,General Electronics, Electrical	358	52
Embedded, Electrical, Communication	328	28	RaspberryPI, Embedded,General Electronics, Electrical	359	52
Embedded, General Electronics, Communication	330	35	RaspberryPl, Embedded,Solar, Electrical	360	53
Embedded, General Electronics, Communication	331	32	Embedded, General Electronics, Communication	362	53
Embedded,Robotics, Communication, General Electronics	332	38	Embedded, General Electronics, Electrical	363	20
Embedded, Robotics, Communication,	333	50	Embedded, Electrical, Power Electronics	364	40
Embedded, Robotics, Communication,	334	51	Electrical, Power Electronics	365	49
Embedded, Robotics, Communication,	335	52	Embedded, Electrical, Communication	366	48
Embedded, General Electronics, Communication	336	30	Embedded, Electrical, Communication	367	49
Embedded, General Electronics, Communication	337	32	Embedded, Electrical, Communication	368	44
Embedded, General Electronics, Electrical, Communication	338	34	Embedded, General Electronics	369	27
Embedded, General Electronics, Communication	339	25	Electrical, Power Electronics, Solar	370	46
Embedded, General Electronics, Communication	340	30	Embedded, Robotics, Communication	372	39
Embedded, General Electronics, Communication	341	27	Embedded, Electrical, Communication	373	40

Categories		Page No.	Categories	Model No.	Page No.
	No. 374	10,30,30,30	Arduino, Embedded, General Electronics,	2001	
Embedded, General Electronics		31	Communication	411	48
Embedded, General Electronics	375	Arduino Embedded General Electronics		414	47
Embedded, Electrical, Communication	376	33	Arduino, Embedded, General Electronics, Sensor based	415	41
Electrical, Power Electronics, Solar	377	47	Arduino, Embedded, Electrical, Communication	416	41
Embedded, Electrical, Power Electronics, Solar	378	44	Embedded, General Electronics, Electrical	417	34
Electrical, Power Electronics, Solar	379	51	Embedded, General Electronics	418	28
Embedded, Electrical, Power Electronics, Solar, Sensor Based	380	36	Arduino, Embedded, Electrical, Sensor Based	419	35
Embedded, Electrical, Power Electronics, Sensor Based	381	24	Electrical, General Electronics	423	31
Embedded, Electrical, Communication, General Electronics	382	45	Embedded, Electrical, Communication	424	12
Embedded, Electrical, Communication, Power Electronics	384	40	Embedded, Sensor Based, Electrical, Communication	425	47
Embedded, Sensor Based, Communication, General Electronics	386	46	Embedded, Electrical, PowerElectronics	426	27
Electrical, Power Electronics,	387	43	Embedded, Electrical, General Electronics	427	33
Embedded, General Electronics, Communication	388	37	Embedded, Electrical, General Electronics	428	32
Embedded, General Electronics, Communication	389	43	Embedded, Electrical, Power Electronics	429	26
Arduino, Embedded, General Electronics	390	38	Embedded, Electrical, Power Electronics	430	31
Embedded, Electrical, Communication	392	50	Embedded, Electrical, Power Electronics	431	34
Embedded, General Electronics	393	27	Embedded, General Electronics, Sensor Based	432	36
Arduino, Embedded, Electrical, Communication	394	43	Embedded, General Electronics, Communication, Sensor Based	433	41
Embedded, Electrical, General Electronics	397	27	Embedded, General Electronics, Sensor Based	434	32
Embedded, General Electronics	399	7	General Electronics, Sensor Based	441	1
Embedded, General Electronics	400	22	General Electronics, Sensor Based	446	2
Embedded, General Electronics	401	24	General Electronics, Sensor Based	448	2
Embedded, Power Electronics, Electrical	402	24	General Electronics, Sensor Based	452	3
Power Electronics, Electrical	406	22	General Electronics, Electrical	454	3
Arduino, Embedded, Robotics	407	50	General Electronics, Electrical	455	3
Arduino, Embedded, General Electronics	408	39	General Electronics, Electrical	456	3
Arduino, Embedded, Robotics	409	39	General Electronics	457	3
Arduino, Embedded, Electrical, General Electronics	410	36	General Electronics	458	4

Categories		Page No.	Categories	Model No.	Page No.
Embedded, General Electronics, Sensor Based		5	General Electronics, Sensor Based	622	56
Embedded, General Electronics	479	7	General Electronics	623	56
Embedded, General Electronics, Sensor Based	481	8	General Electronics, Sensor Based	624	56
Embedded, Electrical	492	11	General Electronics	625	54
Embedded, Electrical, Power Electronics, Communication	494	11	General Electronics	626	55
Embedded, Robotics, Communication	521	17	General Electronics	627	54
Embedded, Sensor Based, General Electronics	525	17	General Electronics, Sensor Based	628	55
Embedded, Electrical, General Electronics	526	17	General Electronics	629	56
Embedded, Sensor Based, General Electronics	531	19	General Electronics, Sensor Based	630	55
Embedded, Electrical, Power Electronics, Communication	548	25	General Electronics, Sensor Based	631	56
Embedded, Electrical, Communication	553	42	General Electronics, Sensor Based	632	55
Embedded, General Electronics, Sensor Based, Communication	554	38	General Electronics, Robotics, Sensor Based	700	6
Embedded, Electrical, Communication	556	43	Robotics	725	54
Embedded, Electrical, Communication	557	46	Robotics	726	54
Embedded, Electrical, Communication, Sensor Based	558	47	Embedded, Electrical, Communication	727	21
General Electronics, Sensor Based	601	54	Embedded, Electrical, Communication	728	21
General Electronics, Sensor Based	602	54	General Electronics, Sensor Based	801	57
General Electronics	603	54	General Electronics, Sensor Based	802	57
General Electronics, Sensor Based	604	54	General Electronics, Sensor Based	803	57
General Electronics, Sensor Based	605	55	General Electronics, Sensor Based	804	56
General Electronics, Sensor Based	606	54	General Electronics, Sensor Based	805	58
General Electronics	607	55	General Electronics, Sensor Based	806	57
General Electronics	608	55	General Electronics, Sensor Based	807	57
General Electronics	609	55	General Electronics, Sensor Based	808	56
General Electronics	610	55	General Electronics, Sensor Based	809	57
General Electronics	611	55	General Electronics, Sensor Based	810	57
General Electronics, Sensor Based	612	56	General Electronics, Sensor Based	811	57
General Electronics	621	55	General Electronics, Sensor Based	812	58

Categories	Model No.	Page No.
General Electronics, Sensor Based	813	58
Embedded, Robotics, General Electronics, Communication, Sensor Based	149A	29
Electrical, Power Electronics	163A	25
Embedded, General Electronics, Communication	170A	29
Embedded, General Electronics,	1A	5
Embedded, General Electronics,	33A	15
Embedded, Robotics, Communication	35A	18
Embedded, General Electronics, Communication	PIC104	35
Embedded, General Electronics, Communication	PIC106	44
Embedded, General Electronics, Sensor Based	PIC107	14
Embedded, General Electronics, Sensor Based	PIC108	7
Embedded, General Electronics, Sensor Based, Solar	PIC111	21
Embedded, General Electronics, Sensor Based,	PIC112	22
Embedded, General Electronics, Communication, Sensor Based	PIC113	41
Embedded, Communication, Electrical	PIC114	20
Embedded, General Electronics, Sensor Based,	PIC116	28
Embedded, General Electronics, Communication,	PIC117	14



S.No.	Model.No.	Product	DIY (Rs.)	Readymade Kit (Rs.)	Project Kit (Rs.)
1	193	Remote Jamming Device: The project is designed to develop IR rays of 38KHz usually emitted by a standard TV remote. The rays developed are powerful enough to overshadow the IR receiver in TV. Thus the remote used would lose its function as long as the IR rays generated by the project are falling on the receiver.	3399	2899	2399
2	208	Step up 6 volt DC to 10 volt DC Using 555 Timer: A 555 timer is used in astable mode to deliver the output approximately twice the input voltage. The output from the 555 timer is given to a voltage doubler circuit to get the desired output.	3399	2899	2399
3	227	Wireless Audio Transmitter For TV: The audio output of the TV is fed to an FM transmitter that transmits the audio to be received by any FM receiver (or a cell phone having FM radio). It can be used to listen to TV sound without disturbing any one else.	3399	2899	2399
4	441	Burglar Alarm on Window Glass Breaking: The project is designed to generate an alarm signal in the event of breaking of an hair thin wire pasted on the window glass panes. The project uses a buzzer to alert the user.	3299	2899	2399
5	205	Mains Operated LED Light: A string of LED's are made to operate at 230V AC by using a series capacitor drop and current limit resistor. This concept of using leds can be adopted to home lighting system in a most cost effective way.	3499	2999	2499

6	446	Sun Set To Sun Rise Lighting Switch (Evening ON to Morning OFF): Varying light intensity falling on an LDR is used as input to a comparator. It is compared with a fixed value to turn ON the appliances through relay at the falling light intensity in the evening to switch OFF in the morning light.	3599	3099	2599
7	300	Self Switching Power Supply: This power supply unit gives a variable regulated DC for microcontroller circuits and switches off automatically in no load condition.	3799	3299	2699
8	448	Auto Switch OFF of TV While Screen Goes Without Video: The project is designed to actuate a relay whenever an input video signal is fed to it. For example, It can be used for switching OFF a TV automatically once the video signals are not available.	4099	3499	2899
9	188	Hidden Active Cell Phone Detector: A 555 timer in mono-stable mode along with a high gain op amp is used to detect Giga Hertz induced signals so produced by an active cell phone with in closer proximity to sound a buzzer alarm.	4299	3699	3099
10	189	Long Range FM Transmitter with Audio Modulation: A microphone is used to feed audio signals to modulate a carrier signal at a frequency of around 106 MHz. This signal is further amplified with an RF power amplifier that is connected to a tuned antenna to cover a line of sight distance of about 2 km (if we use Yagi antenna) or 20-30 Mtrs by GP/stick antenna.	4399	3799	3099
11	216	Touch Controlled Load Switch: The project is designed to develop a touch sensitive switch to control any load. A 555 timer is used in monostable mode to drive a relay to switch ON a load for a fixed time duration.	4299	3699	3099
12	254	Phase Sequence Checker for Three Phase Supply: 3-phase supply of 440V AC 50Hz is fed to a logic circuit comprising of NAND gates and OR gates to detect the sequence of R Y B by triggering a timer for a LED to indicate output phase out of sequence. The output can also be tested by using a sequence meter (not supplied with the kit).	4399	3799	3099

13	452	Temperature Controlled Load by Thermistor Sensor: The project is designed to develop a temperature control system using a thermistor. An op-amp is used to sense the falling resistance of increasing temperature by the property of NTC (negative coefficient thermistor). Then the op-amp used as a comparator actuates a relay.	4399	3799	3099
14	454	Home Appliances Control with Time Delay Switch: The project is designed to develop a time delay based switch to control any load. A 555 timer is used in monostable mode to drive a relay to switch ON/OFF a load for a fixed time duration.	4399	3799	3099
15	455	Automatic Emergency Light with LED: This emergency light takes 230V AC and it converts it in 12V DC to charge a set of rechargeable batteries which is used to lit up a pair of LEDs automatically in the event of mains failure.	4399	3799	3099
16	456	Load Cutoff Switch Upon Over Voltage or Under Voltage: Two 555 timers are used as window comparator. This delivers an error output if the input voltage to them crosses the range beyond the voltage window. A relay is then operated to cutff the load for saftey reasons.	4499	3899	3199
17	222	Fastest Finger Press Quiz Buzzer: A set of 8 switches are interfaced to D-type flip flop working as priority encoder. While number of switches are pressed at same time, it takes the first swtich pressed into consideration and generates a buzzer sound along with the indication of the switch pressed.	4699	3999	3299
18	229	Intelligent Overhead Tank Water Level Indicator: The project is designed to give a display of water level in a tank. The reading given is in the sale of 0 to 9. A priority encoder is interfaced to a decoder to get the display of water level on 7 segment display.	4699	3999	3299
19	457	Music Tone Based Dancing LEDS: Sound signals sensed by condenser microphone are amplified to fed to a decade counter that drives a string of LEDs to blink rhythmatically as per the sound level.	4599	3999	3299

20	458	Telephone Ring Sensed Flasher in Industrial Area: A phone line is connected through an opto isolator to drive a relay whenever telephone ring is detected by the circuit. It switches a 230v lamp to flash as per the telephone ring to draw attention in higly noisy environment.	4699	3999	3299
21	221	Electronic Eye Controlled Security System: The project is designed as a security system based on photo sensing arrangement. It uses a 14- stage ripple carry binary counter to sense the light intensity through LDR. The outup drives a buzzer and a relay for necessary action.	4999	4299	3499
22	7	Lamp Life Extender by ZVS (Zero Voltage Switching): Incandescent lamps exhibit very low resistance in cold condition due to which it draws high current while switched on, resulting in fast failure. Engaging a triac whose switching on time can be precisely controlled by firing it after detecting the zero cross point of the waveform.	5299	4599	3799
23	167	Smooth Start of a Single Phase Induction Motor: The project uses two anti-parallel SCRs in series with the motor to the supply. SCRs are triggered gradually from heavily delayed firing angle to zero delay resulting in gradual increase of supply voltage to the motor. This leads to a smooth start of the motor. A lamp is provided as load for demonstration purpose.	5299	4599	3799
24	24	Density Based Traffic Signal System: The project is designed to develop a density based dynamic traffic signal system. The signal timing changes automatically on sensing the traffic density at the junction. IR sensors are used to monitor the density of the vehicles at the junction. The signals from the IR receivers are fed to the microcontroller to follow different time for different level of traffic.	5599	4799	3999
25	237	High Voltage DC by Marx Generator Principles: A number of capacitors are charged in parallel by pulsed voltage to a specific voltage (V), with 50% or less duty cycle from a DC source. The capacitors are automatically placed in series such that all the (V) gets added to deliver higher voltage based on the number of capacitors used.	5599	4499	3999

26	298	RFID Based Paid Car Parking: It uses a microcontroller along with sensing circuits monitoring entry and exit of cars with help of owner accessed RFID card swipe with a display indication besides indicating the available number of parking.	5699	4899	3999
27	1A	Beacon Flasher Using Microcontroller: An incandescent lamp is made to operate in flashing mode from a microcontroller of 8051 family. For example, this flashing is helpful in giving alert signals mounted on high masts /ambulance/aviation towers/sea shores etc.	5599	4799	3999
28	174	Wireless Power Transfer: The project is to develop a device to transfer power wirelessly to any gadget. This project can also be used for charging batteries those are physically not possible to be connected electrically.	5599	4799	3999
29	470	Obstacle Sensed Switching in Industrial Applications: The project is designed to actuate a load when IR rays are interrupted. This is helpful in industries for sensing movement of material in a conveyor belt for any action to be taken. The project uses 38 KHz IR signal generated feeding an IR diode which is received by tuned IR receiver. When this signal is interrupted and iutput is generated by the microcontroller.	5799	4999	4099
30	6	Thyristor Controlled Power for Induction Motor: The project is designed to control AC power based on the principle of firing angle control. Two thyristors connected in anti parallel are used in series with the load for power control. Efficiency of such power control is very high compared to any other method. A lamp is provided as load for demonstration purpose.	5799	4999	4099

31	14	Bidirectional Rotation of an Induction Motor with a Remote Control Device: The microcontroller receives the infrared signal from the IR remote, the code of which is identified by the receiver to operate a set of relays. The relays switches ON/OFF the appropriate relay to power a split phase induction motor to achieve desired direction by interchanging leading supply phase from the main winding to the auxiliary winding. Please note that a single phase induction motor can be procured at an extra cost over the kit cost.	5899	5099	4199
32	311	Density Based Traffic Signal with Remote Override in Emergency: Remote override control of density based traffic signal by emmergency vehicles like ambulance, fire brigade etc for getting priority in the desired direction.	5899	5099	4199
33	700	Line Following Robotic Vehicle Expandable to Walking and Climbing Robot: The project is designed to develop a robotic vehicle that follows a specific path and also walks and climbs wall. This project doesn't require a microcontroller for its operation. A pair of photo sensors comprising IR transmitter and photo diode is used to detect the specified path for its movement. Note: As per government security norms, batteries would not be included in the kit.	5999	5099	4199
34	29	Line Following Robotic Vehicle: The project is designed to develop a robotic vehicle that follows a specific path. This project doesn't require a microcontroller for its operation. A pair of photo sensors comprising IR transmitter and photo diode are used to detect the specified path for its movement.	5999	5099	4199
35	1	Auto Intensity Control of Street Lights: White Light Emitting Diodes (LED) replaces HID lamps in street lighting system to include dimming feature. A microcontroller of 8051 family is used to control the intensity by developing pulse width modulated signals that drives a MOSFET to switch the LEDs according to achieve desired operation.	6099	5199	4299

36	36	Street Light That Glows ON Detecting Vehicle Movement: The project is designed for LED based street lights. A number of LED street lights glow for a specific distance ahead, on sensing an approaching vehicle and then switches OFF once the vehicle passes by. Thus a lot of energy is saved in this process. Optionally, dimming feature can be used in this sytem while no vehicles are passing on the road.	6099	5199	4299
37	178	Life Cycle Testing of Electrical Loads by Down Counter: The project is designed to be used in industries for testing of electrical loads (lamps, motors etc) using a down counter. A desired number is entered through a keypad interfaced to a microcontroller of 8051 family. Upon activation, the system counts down one in each second till the set number reaches zero. A relay switches the load ON & OFF for every count thus testing the life cycle of the product.	6099	5199	4299
38	399	Programmable Decoration Light: The project is designed for LED based decoration lights. A number of LED lights glow for a specific time in different combinations as per interruptions by a set of IR sensors on board as control commands using a 8051 series microcontroller.	6099	5199	4299
39	479	Pub Used Disco Lights with Power LEDs for Stroboscopic Effect: Cluster of high power LEDs are used to act like stroboscopic light flasher. They are driven by a microcontroller of 8051 family through a MOSFET.	6099	5199	4299
40	PIC108	Density Based Traffic Signal System Using PIC Microcontroller: The project is designed to develop a density based dynamic traffic signal system. The signal timing changes automatically on sensing the traffic density at the junction. IR sensors are used to monitor the density of the vehicles at the junction. The signals from the IR receivers are fed to the microcontroller to follow different time for different level of traffic.	6099	5199	4299

41	144	Using TV Remote as a Cordless Mouse for the Computer: TV remote is used in this project to act as a cordless mouse for the computer. This is achieved by reading the coded data sent from the TV remote by a sensor. The sensor is interfaced to a microcontroller which responds to the coded signals and sends appropriates instructions through serial communication to the PC.	6199	5299	4399
42	228	Four Quadrant DC Motor Speed Control with Microcontroller: The project has been designed to develop a speed control system for DC motor in all the four-quadrant. Using four-quadrant chopper it is possible to demonstrate forward, instant forward brake, reverse, instant reverse brake control of a DC motor It uses an 8051 family microcontroller along with a motor driver IC to drive the motor.	6199	5299	4399
43	481	Conveyor Belt Object Counting with IR Sensing & Display: The project is designed to monitor the counting operations in industries. For example, products moving on a conveyor belt are counted by IR interruption concept and displayed on a seven segment display.	6199	5299	4399
44	48	Portable Programmable Medication Reminder: The project acts as a reminder for people to take medicines in time. Keypad is used to enter the time at which the medicine is required to be taken. The real time clock (RTC) used keeps tracking the time to remind the person by a buzzer sound together with the name of the medicine on the LCD display.	6399	5499	4499
45	161	Cell Phone Based DTMF Controlled Garage Door Opening System: A mobile phone is connected to the control unit so that the data received by the phone is used to open/ close the door. This can be achieved using DTMF technology. The main feature of this project is that the user can control the garage door from any part of the world using his mobile phone.	6399	5499	4499

46	166	Display of Dialed Telephone Numbers on Seven Segment Displays: Dialed telephone numbers are picked up by a DTMF decoder to feed to a microcontroller. This data is trasnmitted ten no's seven segment LED displays for better visibility.	6299	5399	4499
47	8	Three Phase Solid State Relay with ZVS: A three phase solid state relay uses three single phase units with each phase controlled individually by a power triac. A snubber network across the triacs are used for dV/dT protection for inductive loads. The zero crossing feature of the opto-isolator used ensures the load to be switched ON at start of the waveform.	6399	5499	4499
48	192	Sun Tracking Solar Panel: The project uses a solar panel coupled to a stepper motor to track the Sun so that maximum sun light is incident upon the panel at any given time of the day. The microcntroller used is programmed to rotate the stepper motor in regular time intervals so that it tracks the sun. This is better compared to light sensing method that may not be accurate always. The project uses a dummy solar panel for demonstration purpose.	6299	5399	4499
49	10	Industrial Battery Charger by Thyristor Firing Angle Control: DC power for a battery charger is derived from a thyristor controlled rectifier system. AC power is applied to the bridge rectifier comprising of diodes and triacs to get the control from a microcontroller interface through push button switches used for increasing or decreasiong the DC power.	6499	5599	4599
50	33	Programmable Load Shedding Time Management for Utility Department: Multiple time operated electrical load control system is a reliable circuit that takes over the manual task of switch on/off the as per programed time. It has an inbuilt real time clock (RTC) to keep tracking the time and switch ON/OFF the load accordingly.	6499	5599	4599

51	289	Programmable AC Power: Based on the principle of firing angle control of thyristors, their triggering is automatically adjusted to maintain the desired power to the load duly interfaced from a microcontroller with keypad entry programming features. The project uses a lamp such that the entered power matches the required one verified by its intensity. The above operation is carried out by using a TRIAC in series with the AC load.	6499	5599	4599
52	19	Optimum Energy Management System: The project is designed to monitor the number of persons entering as well as exiting a room. Electrical loads are switched ON as the first person enters and switches OFF when the last person leaves. IR sensors used in combination with microcontroller to monitor all the operations. This helps in saving lot of energy.	6699	5699	4699
53	109	Parallel Telephone Lines with Security System: This project can be used in houses and offices where more than one telephone is connected in parallel from a single telephone line. The project is used to connect four telephones in parallel to one line. When any phone is lifted, all the other phones are disconnected from the telephone line automatically with a display of the phone in use.	6699	5699	4699
54	225	Speed Checker to Detect Rash Driving on Highways: The time difference between 2 spots on a highway, one in advance to the other in the direction of the traffic flow, is sensed & fed to a control board to convert the same to the speed of a vehicle and generate a warning upon exceeding specified speed limit.	6599	5699	4699
55	234	PC Controlled Scrolling Message Display for Notice Board: Message sent from the PC is transmitted to the notice board over cable. It goes on scrolling on a LCD display of 2 lines until the next message is entered.	6699	5699	4699

56	241	Four Quadrant DC Motor Control without Microcontroller: The project has been designed to develop a system using timers for DC motor control in all the four-quadrants. Using four-quadrant chopper it is possible to demonstrate forward, instant forward brake, reverse, instant reverse brake control of a DC motor.	6699	5699	4699
57	242	Speed Checker to Detect Rash Driving on Highways: The time difference between 2 spots on a highway, one in advance to the other in the direction of the traffic flow, is sensed & fed to a programmed microcontroller to convert the same to the speed of a vehicle and generate a warning upon exceeding specified speed limit.	6699	5699	4699
58	344	AC PWM Control for Induction Motor: AC PWM based Induction motor speed control having negligible harmonic distortion compared to simple phase angle delayed mode of control.	6599	5699	4699
59	492	IGBT Based Soft Start for Induction Motor: Soft start of induction motor with negligible harmonics by ac chopper using a full bridge in series with the load which is controlled by an IGBT. Soft Start by such method is very highly reliable compared to thyristor based firing angle control that is rich in THD and damages the motor. A lamp is provided as load for demonstration purpose.	6599	5699	4699
60	494	Fan Speed Control by TV Remote: Project uses a standard TV remote for speed control of an induction motor such as fans. An IR receiver is interfaced to a microcontroller to read the coded data from the remote to activate the corresponding output with a digital display. A lamp is provided as load for demonstration purpose.	6699	5699	4699

61	22	PC Based Electrical Load Control: Electrical appliances can be controlled through a PC interfaced to a microcontroller. This interface is done through a level shifter IC. The loads are then controlled through the relays duly interfaced to the relay driver which in turn is connected to the microcontroller.	6799	5799	4799
62	424	PC Mouse operated Electrical Load Control Using VB Application: Electrical appliances are controlled through a PC, upon a GUI in VB interfaced to a microcontroller. This interface is done through a level shifter IC. The loads are then controlled through the relays duly interfaced to the relay driver which in turn is connected to the microcontroller.	6799	5799	4799
63	185	Stamp Value Calculator for Postage Needs: Calculating the weight of the postal documents by an arrangement that is used to control a potentiometer. The output of the same is fed to an ADC duly interfaced to a microcontroller that generates the desired display.	6799	5799	4799
64	3	Auto Power Supply Control from 4 Different Sources: Solar, Mains, Generator & Inverter to Ensure No Break Power: The main scope of the project is to consume the power from supply mains, generator, inverter and solar optimally by using appropriate program through microcontroller in most cost effective way.	6999	5999	4899
65	9	Industrial Power Control by Integral Cycle Switching without Generating Harmonics: Integral cycle control is a method to remove portions of full cycles/one cycle of an AC signal for controlling AC power across linear loads interfaced to a programmed microcontroller of 8051 series. This process of power control generates 1% THD as against 61% of firing angle control. A lamp is provided as load for demonstration purpose.	6899	5899	4899

66	148	DTMF Based Load Control System: The project works on the principle of DTMF tone command so received from any phone to remotely switch any electrical load such as agricultural pump, domestic and industrial loads etc. This device uses a microcontroller of 8051 family interfaced to DTMF decoder for receiving tone commands to actuate loads from the output of the microcontroller as per the program.	6999	5999	4899
67	156	Automatic Surveillance Camera Panning System from PC: The project uses a PC with RS 232 interface to a microcontroller for enabling speed the speed control of motor from the PC by a motor driver IC controlled from the microcontroller.	6999	5999	4899
68	181	BLDC Motor Speed Control with RPM Display: The project is used for controlling the speed of BLDC motor and display the same using an IR method of speed sensing mechanism being driven by PWM controlled MOSFET. This project uses an 8051 family microcontroller.	6899	5899	4899
69	182	Predefined Speed Control of BLDC Motor: The project uses a 8051 family microcontroller interfaced to EEPROM to store the speed information for operation of the motor which is driven by a PWM fed MOSFET. The speed of the motor is sensed through IR sensing mechanism. The input speed is given by a set of switches. A LCD display is interfaced to the microcontroller to display the speed of the motor.	6999	5999	4899
70	171	Line Following Robotic Vehicle Using Microcontroller: The project is designed to develop a robotic vehicle that follows a specific path. This project uses a microcontroller of 8051 family for its operation. A pair of photo sensors comprising IR transmitter and photo diode are interfaced to the controller to detect the specified path for its movement.	6599	5699	4999

71	PIC117	Using TV Remote as a Cordless Mouse for the Computer Using PIC Microcontroller: TV remote is used in this project to act as a cordless mouse for the computer. This is achieved by reading the coded data sent from the TV remote by a sensor. The sensor is interfaced to a microcontroller which responds to the coded signals and sends appropriates instructions through serial communication to the PC.	7099	6099	4999
72	150	Synchronized Traffic Signals: (Get green signal all through successive street junctions). All the traffic junctions in a main road are synchronized for signal lighting such that the vehicle gets green signal at all the junctions while moving at a normal speed.	7099	6099	4999
73	53	Security System with User Changeable Password: The microcontroller based lock indication is an access control system that allows only authorized persons knowing the password only. Password is stored in another dedicated EEPROM that can be changed at any time unlike a fixed one burnt permanently on to the microcontroller.	8599	6399	5099
74	220	Precise Illumination Control of Lamp: A precise illumination in terms of percentage of the full illumination is entered through a numeric keypad. A microcontroller of 8051 family is used to maintain the illumination of a lamp. The firing angle is automatically adjusted to maintain the load power to the lamp such that the entered intensity matches the required one.	7199	6199	5099
75	PIC107	Street Light That Glows ON Detecting Vehicle Movement: The project is designed for LED based street lights using PIC microcontroller. A number of LED street lights glow for a specific distance ahead, on sensing an approaching vehicle and then switches OFF once the vehicle passes by. Thus a lot of energy is saved in this process. Optionally, dimming feature can be used in this sytem while no vehicles are passing on the road.	7199	6199	5099

76	64	Detecting Power Grid Synchronization Failure on Sensing Frequency or Voltage Beyond Acceptable Range: Synchronization failure of an alternate supply source connected to the grid is detected by this system. The failure can be either under/over voltage or under/over frequency. The project uses a 8051 family microcontroller to perform this operation. This mechanism is popularly known as islanding of grid connected source.	7299	6299	5199
77	33A	Automatic Bell System for Institutions: The project is designed to develop an automatic bell system for academic institutions. Multiple time operated electrical load control circuit is used to develop this system. It has an inbuilt real time clock (RTC) to keep tracking the time and switch ON/OFF the bell accordingly.	7299	6299	5199
78	11	Ultra Fast Acting Electronic Circuit Breaker:The project is to shut down the power supply when it is overloaded. Conventional circuit breaker like MCB based is on thermal bimetal lever trip mechanism. It is very slow and the trip time is dependent upon the percentage of overload. This project senses the current passing through a series element and the corresponding voltage drop is compared against the preset voltage proportional to the current by a level comparator to generate an output for the load to trip.the load to trip.	7299	6299	5199
79	169	Non Contact Tachometer: The project uses the IR transmitting and receiving technique by reflection of IR rays from any rotating object such as a motor shaft. This will help measuring the speed without any physical contact often required in industrial environment.	7499	6399	5299

80	12	Automatic Irrigation System on Sensing Soil Moisture Content: The project is designed to operate a pump for automatic irrigation. It comprises of moisture sensing arrangement interfaced to an op-amp configured as a comparator. So whenver moisture in the soil reduces, it turns the water pump ON. This results in increase of the moisture content which in tunr switches OFF the motor. The above operations are monitored by a 8051 family microcontroller.	7699	6599	5399
81	15	Programmable Switching Control for Industrial Automation in Repetitive Nature of Work: The project is based on a microcontroller (8051 series MC) for programmable logic control of industrial loads by the user. Few switches are duly interfaced to the microcontroller which can be used to program the system in set mode, auto mode or manual mode. Loads are driven sequentially or individually in programmable time intervals from the output of the microcontroller based on the mode selected.	7699	6599	5399
82	30	TV Remote Operated Domestic Appliances Control: The project is designed to operate electrical loads using a TV remote. The remote transmits coded infrared data which is then received by a sensor interfaced to the control unit. The system operates electrical loads depending on the data transmitted from the TV remote.	7599	6499	5399
83	155	Closed Loop Control for a Brushless DC Motor to Run at the Exactly Entered Speed: A keypad is interfaced to a 8051 series microcontroller to enter the desired speed for a BLDC motor. Speed sensing arrangement is made on IR reflection principle which is interfaced to the microcontroller as an input for the program to deliver serired PWM pulses to maintain the speed.	7699	6599	5399

84	521	Robotic Vehicle Operated by a TV Remote: The project is designed to control a robotic vehicle using a standard TV remote. IR sensor is interfaced to the control unit on the robot for sensing the IR signals transmitted by the remote. This data is conveyed to the control unit which moves the robot as desired. An 8051 series microcontroller is used in this project as control device.	7699	6599	5399
85	525	Medication Reminder Using PIC Microcontroller: The project acts as a reminder for people to take medicines in time. Keypad is used to enter the time at which the medicine is required to be taken. The real time clock (RTC) used keeps tracking the time to remind the person by a buzzer sound together with the name of the medicine on the LCD display.	7699	6599	5399
86	2	Speed Control Unit Designed for a DC Motor: The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). A microcontroller is used to deliver the PWM pulses to the motor.	7799	6699	5499
87	213	Solar Power Charge Controller: The solar energy is converted to electrical energy by photo-voltaic cells. This energy is stored in batteries during day time for utilizing the same during night time. This project deals with a controlled charging mechanism which over charge, deep discharge and under voltage of the battery.	7799	6699	5499
88	526	PWM Based Speed Control for DC Motor: The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). A microcontroller is used to deliver the PWM pulses to the motor.	7799	6699	5499

89	49	Programmable Energy Meter for Electrical Load Survey: A The project is designed to automatically calculate energy details within a minute using programmble microcntroller of 8051 family. It indicates on an LCD display, the load consumption in units and cost in rupees for any load required to be used for a specific number of hours.	8799	6499	5599
90	282	Industrial Temperature Controller: This practical temperature controller controls the temperature of any heating device according to its requirement for any industrial application. Using IC DS1621 Digital temperature sensor user-defined maximum and minimum temperature settings are stored in a nonvolatile memory EEPROM through 8051 series microcontroller to switch on and off the heater load to maintain the temperature with in the limits.	7899	6799	5599
91	164	Underground Cable Fault Distance Locator: A fixed set of resistors are used representing the distance of the cable in kilometers. A DC voltage is fed over the line in mutiplexing mode in combination with a ADC to detect the fault current and show the distance on a LCD display based on voltage drop principle.	7899	6799	5599
92	172	Automatic Dialing to any Telephone Using I2C Protocol on Detecting Burglary: Automatic dialing of stored number (in EEPROM) by a microcontroller is achieved in the event of any burgalary attempt. A keypad is used to load the number onto the EEPROM. An encoder is used to dial the number through the landline connected to the device. The system is protected by a password.	8099	6899	5699
93	35A	Cell Phone Controlled Robotic Vehicle: The project is designed to develop a robotic vehicle that is controlled by a cell phone. DTMF commands from a phone is sent to another cell phone which is mounted on the robot. These commands are fed to a microcontroller of 8051 family to operate the vehicle movement through motor interface.	8799	6499	5699

94	531	Human Body Temperature Sensed Automatic Door Opening System: Automatic door opening system is achieved by sensing any approaching body by PIR sensor interfaced to programmed microcontroller of 8051 family. Upon sensing human movement, microcontroller drives a motor through motor driver IC with locked rotor protection system for door operation.	8199	6999	5799
95	32	Password Based Circuit Breaker: The project is designed to control a circuit breaker with help of a password only. A keypad is interfaced to a microcontroller to enter the password. Fatal electrical accidents to the line man can thus be avoided which often happens due to lack of communication and co-ordination between the maintenance staff and the electric substation staff.	8399	7199	5899
96	61	Networking of Multiple Microcontrollers: The project uses three microcontrollers in network to establish communication between them. One MC is connected to the input while the other to a display unit and the thrid one to an output device. Being interconnected, serial communication between them results in desired action to take place as per the logic of the program.	8399	7199	5899
97	186	Dish Positioning Control by IR Remote: Pthe project is designed to enable 3D movement of a dish by using two DC geared motors. One motor rotates in horizontal plane while the other in vertical plane. The project is controlled by a IR remote for distant operation of the dish positioning.	8299	7099	5899
98	290	Dual Converter: This single phase dual converter consists of a pair of thyristor controlled bridge (4 SCRs X 2) that enables a DC motor to get reversed polarity for either direction rotation and speed control also by thyristor triggering from Microcontroller to each bridge SCR bank of duly interfaced through opto-isolators.	8299	7099	5899

99	363	Over Voltage- Under Voltage Protection: Two comparators of a quad OPAMP IC is used to form a window comparator for sensing low / high input voltage while their 'OR' logic wired output drives a relay to cut-off the load beyond a specified range for safety reasons with an audio alarm by a buzzer driven from another comparator.	8399	7199	5899
100	PIC114	Energy Meter Billing with Load Control over GSM with User Programmable Number Features (by PIC Microcontroller): The project is to develop a wireless energy meter reading and load control. The reading of the energy meter is also sent by to any cell phone by a message through GSM modem by user programable number upon a mis-call which also receives commands from the cell phone to control the electrical loads.	11800	8900	5900
101	18	Precise Digital Temperature Control: The project uses a digital temperature sensor for precise control of temperature in medical applications or industries. This system is better than analog/thermostat system, which has poor accuracy. A microcontroller of 8051 family is interfaced with set of swithces, sensor and 7 segment displays for setting the desired temperature. A load such as heater or lamp is thus accuated to maintain the desired temperature.	8499	7299	5999
102	42	Cyclo Converter Using Thyristors: It is difficult to vary speed of an induction motor which is one of the main disadvantage. This is overcome by using a thyristor controlled cycloconverter that enables the speed to be lowered in three steps. A microcontroller of 8051 family is used to trigger a SCR bank of 8nos, isolated by opto isolators to achieve F,F/2 & F/3 by an appropriate program. F stands for frequency. Please note that a single phase induction motor can be procured at an extra cost over the kit cost.	8499	7299	5999

103	343	Wireless Power Transfer in 3D Space: Wireless power transfer up to 10 watts in 3 D space using high frequency from 38 KHz to 40 KHz through tuned circuits.	8499	7299	5999
104	PIC111	Solar Energy Measurement System: Solar photovoltaic data such as voltage, current, temperature, light intensity for calculating solar insolation etc are monitored by a PIC microcontroller having built in multi channel ADC and displayed on a LCD screen.	8599	7399	6099
105	76	SCADA (Supervisory Control & Data Acquisition) for Remote Industrial Plant: Supervisor sitting on the PC terminal is able to control plant parameters remotely over RS232 network while monitoring the data acquired through several sensors. The project uses a front end for the control and a backend with microcontroller interfaced to an ADC from temperature sensors for data collection and control.	8999	7699	6299
106	727	IOT Based Home Automation over the Cloud: It is to control electrical load over the internet from anywhere in the world with status update on password protected dedicated web site with all the hardware housed in a supplied compact enclosure of 2" x 2.5" for plug and play home automation .	8999	7699	6299
107	728	IOT based load control over standalone Wi-F: it is to control electrical load over the internet from anywhere in the world with a status update on password protected dedicated website with all the hardware housed in a supplied compact enclosure of 2" x	8999	7699	6299

108	406	Single Phase Induction Motor Speed Control: The project uses two anti-parallel SCRs in series with an induction motor to the mains supply. SCRs are triggered from a firing angle trigger circuit having a potentio meter to gradually control delayed firing angle from zero delay resulting in gradual increase in supply voltage to the motor. This leads to a smooth speed control of the motor. A lamp is provided as load for demonstration purpose.	9099	7799	6399
109	59	Minimizing Penalty in Industrial Power Consumption by Engaging APFC Unit: Automatic Power Factor Compensation (APFC) is achieved by engaging number of shunt capacitor in parallel to inductive loads. The time lag between zero voltage and zero current is fed to the microcontroller (8051 family) that drives relays from its output for bringing shunt capacitors across the load till the power factor reaches 0.9.	9399	7999	6599
110	251	Power Saver for Industries & Commercial Establishments: The project is designed for lagging current compensation by engaging shunt capacitors automatically as per the requirement against the inductive loads largely used in industries. This saves lot of power and thus reduces electric bill in domestic and commercial establishments.	9399	7999	6599
111	400	Parking Availability Indication System: The project is designed to develop a density based parking availability indication system. The parking availability changes automatically on sensing the vehicle density at the entry point through IR sensors. Signals from IR receivers are fed to the microcontroller to monitor the availability of parking space.	9299	7999	6599
112	PIC112	Synchronized Traffic Signals at Various Junctions Using PIC Microcontroller: (Get green signal all through successive street junctions). All the traffic junctions in a main road are synchronized for signal lighting such that the vehicle gets green signal at all the junctions while moving at a normal speed.	9299	7999	6599

113	168	High Voltage DC up to 2KV from AC by Using Diode and Capacitors in Voltage Multiplier Circuit: 1000 PIV diodes in combination with 100uF electrolytic capacitors forming a ladder network multiplies the input AC to develop DC output 7 times the input read on a multimeter approximately.	9499	8099	6699
114	244	FACTS (Flexible AC Transmission) by TSR: The project is used to achieve static voltage compensation under FACTS using thyristor switched reactor (TSR) in shunt. This helps in lowering the voltage at the load end that may draw leading current either during charging the transmission line or during low loads.	9499	8099	6699
115	160	Induction Motor Protection System: The project is designed to protect an induction motor from single phasing and over temperature. It uses sensors interfaced to comparators for disconnecting the motor through a realy. The project is supplied with lamps in place of 3 phase motor for demonstration purpose.	9599	8199	6799
116	243	FACTS by SVC(Flexible AC Transmission): Static VAR Compensation under FACTS is achieved using TSC, thyristor switched capacitors based on shunt compensation. These are duly controlled from a programmed microcontroller of 8051 family.	9699	8299	6799
117	13	Automatic Star Delta Starter Using Relays and Adjustable Electronic Timer for Induction Motor: The project is designed to start a 3 phase motor at 440 volt AC mains supply 50 Hz with a set of 12 volt DC relays in star mode and then to delta mode by an electronically adjustable timer. A set of relays are used to shift the motor connections from star to delta with a time delay. The project is supplied with six lamps instead of a 3 phase motor i.e., two lamps representing each phase winding of the motor.	9799	8399	6899

118	309	Propeller Display of Message by Virtual LEDS: Microcontroller interfaced LEDs mounted on a single coloumn of 10 LEDs only displays programed text message virtually while rotating at high speed based upon the principle of persitence of vision of eye.	9799	8399	6899
119	401	Ambulance Flashing Light with Beeper: An incandescent lamp is made to operate in flashing mode from a microcontroller of 8051 family. For example, this flashing is helpful in giving specific visual alert signals mounted on ambulance together with audio signal by a buzzer.	9799	8399	6899
120	402	LED Lamp Dimmer Circuit: White Light Emitting Diodes (LED) replaces HID lamps in industrial lighting system to include dimming feature for energy saving during off peak/ idling hours. A microcontroller of 8051 family is used to control the intensity by developing pulse width modulated signals that drives a MOSFET to switch the LEDs according to the push button commands sent.	9799	8399	6899
121	381	LDR Based Power Saver for Intensity Controlled Street Light: .White Light Emitting Diodes (LED) replaces HID lamps in street lighting system to include dimming feature for dimming together with LDR sensing for daylight inhibit. A 8051 series microcontroller is used to control the intensity by developing pulse width modulated signals that drives a MOSFET to switch the LEDs according to achieve desired operation.	9899	8499	6999
122	232	Pre Stampede Monitoring and Alarm System: A large number of pressure actuated switches interfaced to a microcontroller is used to achieve pre-stampede alarm system. A buzzer sound is generated once the large crowd concentrates at place exceeding the safe number.	10099	8599	7099

123	339	Density Based Auto Traffic Signal Control with Android Based Remote Override: Remote override control of density based traffic signal by emmergency vehicles like ambulance, fire brigade etc for getting priority in the desired direction through remotely operated commands to a microcontroller by touch screen based user friendly GUI on any smart phone with Android applications.	10099	8599	7099
124	163A	Electronic Soft Start for 3 Phase Induction Motor: 6nos. of SCRs i.e., two in anti parallel in each phase are phase controlled in a similar manner to a light dimmer. They are gradually turned ON for a part of each cycle to control the voltage by varying the conduction angle of the SCRs. By variation of the conduction angle, the output voltage is reduced during start and then smoothly increased to full value within few cycles. Please note that lamps are provided in this project for demonstration purpose.	10199	8699	7199
125	226	Home Automation Using Digital Control: A circuit interfaced to a land line telephone is used to control home appliances remotely using DTMF technology but without using any microcontroller or any program.	10299	8799	7299
126	375	Vehicle Movement Sensed Streetlight with Daytime auto off Features: .The project is designed for LED based street lights. A number of LED street lights glow for a specific distance ahead, on sensing an approaching vehicle and then switches off once the vehicle passes by. Thus a lot of energy is saved in this process. Dimming feature provided is used in this system while no vehicles are passing on the road. It has built in daytime auto switch off features by LDR sensing.	10299	8799	7299
127	548	Android Based Smart Phone Used for Induction Motor Control: Speed control of an induction motor such as fans by a triac interfaced microcontroller through remotely operated commands to it in steps by touch screen based user friendly GUI on any smart phone with Android applications.	10399	8899	7299

128	47	Distance Measurement by Ultrasonic Sensor: The project is designed to measure the distance of any object by using an ultrasonic transducer. The transmitted ultrasonic waves are reflected back from the object and received by the transducer again. The total time taken from sending the waves to receiving it is calculated by taking into consideration the velocity of sound by a program running on the microcontroller. The distance is then displayed on an LCD interfaced to the microcontroller of 8051 family.	10499	8999	7399
129	66	Solar Powered LED Street Light with Auto Intensity Control: The project is designed for LED based street lights with auto intensity control using solar power from photovoltaic cells. Intensity control is achieved through a microcontroller of 8051 family. The project stores energy in a battery during day time and automatically operates street light in evening with varying intensity control to minimize waste of energy.	11499	8899	7399
130	292	Contactless Liquid Level Controller: Unlike traditional contact based level controller this most reliable controller uses ultrasonic reflection for sensing liquid level in a tank to start the filling pump at certain low level and stop that at highest level automatically.	10499	8999	7399
131	429	Thyristor Controlled Power for Induction Motor using PIC Microcontroller: The project is designed to control AC power based on the principle of firing angle control. Two thyristors connected in antiparallel are used in series with the load for power control. A lamp is provided as load for demonstration purpose.	10499	8999	7399

132	369	EVM-Electronic Voting Machine: 8 candidate based EVM to store and retrieve cumulative data at any time saved in non-volatile EEPROM interfaced to a set of 8 switches for 8 candidates (expandable) using a programmed microcontroller.	10699	9099	7499
133	426	Auto Intensity Control of Street Lights using PIC Microcontroller: White Light Emitting Diodes (LED) replaces HID lamps in street lighting system to include dimming feature. A PIC microcontroller is used to control the intensity by developing pulse width modulated signals that drives a MOSFET to switch the LEDs to achieve desired operation.	10599	9099	7499
134	341	Remotely Controlled Android Based Electronic Notice Board: The microcontroller receives the message for LCD display through remotely operated commands to it by touch screen based user friendly GUI from any smart phone with Android applications truly making it a wireless notice board.	10999	9399	7699
135	393	Embedded Quiz Monitoring System for Team Performance Evaluation: A set of 8 switches are interfaced to a microcontroller with display and priority time allotment features. If a number of switches are pressed at same time, it takes the first switch pressed into consideration and generates a buzzer sound along with the display after expiry of the time limit.	10999	9399	7699
136	397	Real Time Clock Based LED Street Light Automation Using RTC and I2C Protocol: The project uses 2 separate units each one with one microcontroller. Multiple time operated relay circuit takes over the manual task of switch on/off as per programmed time with an inbuilt real time clock (RTC) to keep track of the time. It uses one mains operated LED board as street light load.	10999	9399	7699

137	418	Celsius Scale Thermometer using Microcontroller: Reading precise analog temperature from LM35 using an A to D converter duly interfaced to a microcontroller that generates the desired display on a 16x2 LCD.	10999	9399	7699
138	PIC116	Pre Stampede Monitoring and Alarm System Using PIC Microcontroller: A large number of pressure actuated switches interfaced to a microcontroller is used to achieve pre-stampede alarm system. A buzzer sound is generated once the large crowd concentrates at place exceeding the safe number.	10899	9299	7699
139	246	RF Based Home Automation System: Using RF technology several loads in home or office to be controlled for optimum use of energy.	11099	9499	7799
140	328	Home Automation by Android Application Based Remote Control:The project is designed to operate electrical loads using triacs interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications for loads home or office automation for optimum use of energy.	11199	9599	7899
141	342	Remote Operated Domestic Appliances Control by Android Application: The project is designed to operate electrical loads using relays interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	11199	9599	7899

142	170	RFID Based Attendance System: RFID tag with details of the employee keep tracking of their attendance while swiped on the RFID reader interfaced to a microcontroller with LCD display for indication.	11399	9699	7999
143	325	Remote AC Power Control by Android Application with LCD Display:Based on the principle of firing angle control of two thyristors connected in anti parallel is fed for the output from an embedded microcontroller circuit having LCD display. The firing angle is remotely controlled to get reduced load power in steps by touch screen based user friendly GUI on any smart phone with Android applications.	11299	9699	7999
144	348	Arduino Based Auto Intensity Control of Street Lights: White Light Emitting Diodes (LED) replacing HID lamps in street lighting system with light dimming feature is interfaced to an Arduino board used to develop pulse width modulated signals that drives a MOSFET to switch a number of LEDs for controling the intensity.	11399	9699	7999
145	149A	Metal Detector Robotic Vehicle: The project is designed to develop a robotic vehicle that can sense land mines ahead of it. The robot is controlled by a remote using RF technology. It consists of a metal detector circuit interfaced to the control unit that alarms the user behind it about a suspected land mine ahead. An 8051 series of microcontroller is used for the desired operation.	11299	9699	7999
146	170A	RFID Based Passport Details: Identifying the passport holder through data stored in RFID tag by retrieving the same through a reader duly interfaced to the microcontroller by a LCD display.	11399	9699	7999

147	23	Secret Code Enabled Secure Communication Using RF Technology: The project helps sending secured message transmitted through RF communication by using microcontroller and received by another microcontroller where the message is retrieved against a secret code used by the transmitter. LCD display units at transmitter and receiver is userd to display the message.	11499	9799	8099
148	340	Remote Password Operated Security Control by Android Applications: The microcontroller based lock indication is an access control system that allows authorized persons knowing the password only. Password is stored in another dedicated EEPROM that can be changed at any time unlike a fixed one burnt permanently on to the microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	11499	9799	8099
149	353	ATMEGA Based Garage Door Opening: An Anroid OS based cell phone is used to remotely control a garage door motor through Bluetooth system connected to a programed Atmega microcontroller so that the data received with accepted password is used to operate the relay driving the motor. Wrong password entry develops a buzzer alarm.	11499	9799	8099
150	249	Obstacle Avoidance Robotic Vehicle: Ultrasonic sensor based robotic vehicle that avoids any obstacle and changes its direction as required. A microcontroller of 8051 family is used for achieving the desired function.	11499	9799	8099
151	336	Four Quadrant Operation of DC Motor Remotely Controlled by Android Applications: The project has been designed to develop a speed control system for DC motor in all the four-quadrant. Using four-quadrant chopper it is possible to demonstrate forward, instant forward brake, reverse, instant reverse brake control of a DC motor using a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	11699	9999	8199

152	374	EVM-Electronic Voting Machine using PIC Microcontroller: 8 candidate based EVM to store and retrieve cumulative data at any time saved in non-volatile EEPROM interfaced to a set of 8 switches for 8 candidates (expandable) using a PIC series microcontroller.	11599	9899	8199
153	423	Four Quadrant DC Motor Control without Microcontroller with speed control: The project has been designed to develop a system using timers for DC motor control in all the four-quadrants together with speed control. Using four-quadrant chopper it is made to demonstrate forward, instant forward brake, reverse, instant reverse brake control of a DC motor.	11599	9899	8199
154	430	Industrial Power Control by Integral Cycle Switching without Generating Harmonics using PIC Microcontroller: Integral cycle control is a method to remove portions of full cycles or cycle of an AC signal for controlling AC power across linear loads interfaced to a programmed PIC microcontroller. This process of power control generates 1% THD as against 61% of firing angle control. A lamp is provided as load for demonstration purpose.	11599	9899	8199
155	165	Three Phase Fault Analysis with Auto Reset on Temporary Fault and Permanent Trip Otherwise: Six numbers of step down transformers are used for forming star and delta secondaries at low voltage output. Fault condition is created with a set of switches to input LL, LG, 3L fault to the circuit. This triggers a 555 timer in monostable to reset after fault clearance in a short duration temporary fault or permanentaly trip the output incase of prolonged fault.	11599	9899	8199
156	27	RF Controlled Robotic Vehicle with Laser Beam Arrangement: The project is designed to control a robotic vehicle by using a RF technology for remote operation. A low power laser light is interfaced for demonstrating the possibilities of destroying a distant object by its beam. An 8051 series of microcontroller is used for the desired operation.	11999	10199	8399

157	327	Remote Speed Control of DC Motor by Android Applications: Speed control of DC motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control) through remotely operated commands to the microcontroller in steps by touch screen based user friendly GUI on any smart phone with Android applications.	11899	10199	8399
158	331	Password Based Remote Controlled Door Opening by Android Application: The project is designed to operate a motor operated door interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	11899	10199	8399
159	337	Railway Level Crossing Gate Operation Remotely by Android: Railway level crossing gate motor ,controlled by the the engine driver from a smart phone to a microcontroller through remotely operated commands to its by touch screen based user friendly GUI with Android applications for deriving an output to dive a relay for the gate motor operation.	11899	10199	8399
160	428	Auto Power Supply Control from 4 Different Sources using PIC Microcontroller: Solar, Mains, Generator & Inverter to Ensure No Break Power: The main scope of the project is to use the power from 4 different sources of energy such as utility mains, generator, inverter and solar optimally by using appropriate program through microcontroller in the most cost effective way.	11899	10199	8399
161	434	Tank Water Level Controller: .The project is designed to give a display of water level in a tank by 16x2 LCD display and control a pump motor on or off depending upon the requirement to maintain a certain water level as required.	11999	10199	8399

162	427	Speed Control Unit Designed for a DC Motor using PIC Microcontroller: The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it popularly known as PWM control. A PIC microcontroller is used to deliver the PWM pulses to the motor.	12099	10299	8499
163	158	RFID Security Access Control System: RFID system is used to authorise the tag holder to enter a secure area. The RFID reader reads the data present on the RFID tag. This data is compared in microcontroller to match the built in data for status display and authorizing the entry which is indicated with a lamp coupled with an LCD display.	12199	10399	8599
164	245	UPFC Related Display of Lag and Lead Power Factor: Microcontroller based LCD display of lagging current, leading current & linear current together with reading of power factor & the leading / lagging time of the current vs voltage. It has provision of choosing the increasing inductive load, switching to linear load and also has an arrangement of auto increment of the capacitive load programmatically.	12199	10399	8599
165	326	Android Application Controlled Remote Robot Operation: The project is designed to control a robotic vehicle using motors interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	12199	10399	8599
166	376	Cell Phone Controlled Home Appliance Switching by PIC microcontroller: The project works on the principle of DTMF tone command received from any cell phone to remotely operate any electrical load such as agricultural pump, domestic and industrial loads etc. This device uses a microcontroller of PIC family interfaced to DTMF decoder for receiving tone commands to actuate loads from the output of the microcontroller as per the program.	12199	10399	8599

167	338	Android Based Remotely Programmable Sequential Load Operation: The project is designed to operate electrical loads using relays interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications .The touch screen switches operated remotely are used to program the system in set mode, auto mode or manual mode. Loads are driven sequentially or individually in programmable time intervals from the output of the microcontroller based on the mode selected remotely.	12299	10499	8699
168	351	Arduino Based Underground Cable Fault Detection: A fixed set of resistors are used representing the distance of the underground cable in kilometers. A DC voltage is fed over the line in mutiplexing mode in combination with the built-in ADC of an Arduino board to detect the fault current and show the distance on a LCD display based on varying voltage drop principle.	12499	10699	8799
169	417	Embedded Password Based Access Control System using I2C Protocol: The project is designed to control a circuit breaker with help of a password only. A keypad is interfaced to a microcontroller to enter the password which is stored in EEPROM. Only after the password matches the circuit breaker can be operated. Fatal electrical accidents to the line man can thus be avoided.	12699	10799	8899
170	431	Ultrafast Acting Electronic Circuit Breaker Using PIC Microcontroller: The project is used to shut down the power supply when it is overloaded. Conventional circuit breaker like MCB is based on thermal bimetal lever trip mechanism. It is very slow and the trip time is dependent upon the percentage of overload. This project senses the current passing through a series element and the corresponding voltage drop across it is compared against a preset voltage proportional to the current by a level comparator to generate an output for the load to trip having display arrangement by a PIC microcontroller.	12599	10799	8899

171	330	Remote Alignment of 3D Dish Positioning by Android Application:The main application of using a dish antenna to position it to the exact angle by remotely operated commands to it by touch screen based user friendly GUI from any smart phone with Android applications.	12799	10899	8999
172	419	Arduino Managed High Sensitive LDR based Power Saver for Street Light Control System: White Light Emitting Diodes (LED) replaces HID lamps in street lighting system to include dimming feature for dimming together with LDR sensing for daylight inhibit. An ARDUINO is used to control the intensity by developing pulse width modulated signals that drives a MOSFET to switch the LEDs according to achieve desired operation.	12799	10899	8999
173	173	Auto Selection of any Available Phase, In 3 Phase Supply System: The project is designed to provide uninterrupted AC mains supply i.e., 230 volt to the single phase load. This is achieved by automatic change over of the load from the missigng phase to the next available phase in a 3 phase system.	12999	11099	9099
174	PIC104	RFID Based Device Control and Authentication(using PIC Microcontroller): RFID system is used to authorise the tag holder to enter a secure area. The RFID reader reads the data present on the RFID tag. This data is compared in microcontroller to match the built in data for status display and authorizing the entry which is indicated with a lamp coupled with an LCD display.	12999	10499	9099
175	247	Wireless Message Communication between Two Computers: A pair of 2.4Ghz transreceiver units are used for bidirectional communication from one PC to another wirelessly using hyper terminal.	13099	11199	9199

176	432	Automatic Irrigation System on Sensing Soil Moisture using PIC Microcontroller.: The project is designed to operate a pump for automatic irrigation. It comprises of moisture sensing arrangement interfaced to an op-amp configured as a comparator. So whenever moisture in the soil reduces, it turns the water pump on. Whenever it results in appropriate moisture content it switches off the motor. The above operations are monitored by a PIC microcontroller.	13099	11199	9199
177	312	Xbee Based Remote Monitoring of 3 Parameters on Transformer / Generator Health: 3 parameters such as voltage, current, temperature of a transformer or any other live equipemnt is monitored remotely over XBEE communication to remote terminal with relay control board at the receiver end in the event of abnormal parameters encountered.	13299	11399	9399
178	380	Solar Highway Lighting System with Auto Turn Off in Daytime: The project is designed for LED based solar street light with charge controller. The lights glow in the dark with full intensity and becomes dim progressively as the day approaches to get fully switched off. Thus a lot of energy is saved in this process. It has built in auto daytime turn off feature by LDR sensing.	13699	11699	9599
179	233	Unique Office Communication System Using RF: Extremely useful PC based RF communication system in an office from the boss to the subordinates having small LCD display terminals. This is interfaced to independent microcontrollers which receives message on selective or common to all basis with a receive tone alert.	14799	11999	9699
180	410	Arduino based 4 Quadrant DC Motor Control: The project has been designed to develop a speed control system for DC motor in all four-quadrant. Using four-quadrant chopper it is possible to demonstrate forward, instant forward brake, reverse, instant reverse brake control of a DC motor It uses an Arduino board along with a motor driver IC to drive the motor	13799	11799	9699

181	350	Arduino Based Solar Street Light LED based street lights with auto intensity control using solar power from photovoltaic cells duly interfaced to an Arduino board. The project stores solar energy in a battery during day time and automatically operates street light in evening with varying intensity control to minimize waste of energy.	13899	11899	9799
182	355	ARM Cortex (STM32) Based Motor Speed Control:The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). An ARM cortex (STM32) board is used to deliver the PWM pulses to the motor.	12999	10799	9799
183	388	Android Phone Speech Recognition Sensed Voice Command based Notice Board Display: Remote Notice board with voice message input from an Android cell phone with speech recognition application using Bluetooth mode of communication is converted to text data through the receiving Bluetooth module, forming as input to a 8051 microcontroller that converts the message read to a text display.	13899	11899	9799
184	21	Security System Using Smart Card Technology: The project is a security system developed to avoid unauthorised acess to any connected device. The system uses smart card technology to identify the authorized personnel, possessing a valid card with him/her, to acess any secure area or deivce.	17599	12199	10099

185	390	Arduino based Automatic Temperature Controlled Fan Speed Regulator: Using an analog temperature LM35 interfaced to the built in ADC of a programmed Arduino to develop varying duty cycle of PWM output for a driver IC to run a DC motor automatically according to the sensed temperature at different speed based on the temperature sensed.	14299	12199	10099
186	554	Remote Monitoring of Patient Body Temperature over Internet: Body temperature of a patient is sent over the internet upon a dedicated webpage to anywhere in the world live either for private or public view in user selected chart format, an IOT based project	14299	12199	10099
187	235	Touch Screen Based Industrial Load Switching: Touch screen panel managed industrial switching system(or home) for industrial load control in corrosive / inflammable environment that prohibits use of conventional switches.	14499	12399	10199
188	34	Object Detection by Ultrasonic Means: This ultrasonic proximity detector is particularly useful for detecting objects ahead within a certain distance such as surveillance security areas, wild life photography. The detector is interfaced to a microcontroller of 8051 family. The controller takes appropriate action after receiving the signal from the transducer. In this project we are using a magnetic gun as an output from the microcontroller.	14599	12499	10299
189	332	Metal Detector Robotic Vehicle Operated by Android Application: The project is designed to control a robotic vehicle using motors interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications. It also consists of a metal detector circuit interfaced to the control unit that alarms the user behind it about a suspected land mine ahead.	14599	12499	10299

190	408	Arduino based DC Motor Speed Control: The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). An Arduino board is used to deliver the PWM pulses to the motor through a motor driver IC.	14599	12499	10299
191	409	Arduino Based Line Following Robot: The project is designed to develop a robotic vehicle that follows a specific path. This project uses an Arduino board for its operation. A pair of photo sensors comprising IR transmitter and photodiode is interfaced to the Arduino to detect the specified path for sending signal to the Arduino that delivers desired control signal to a motor driver IC for the motors to follow the movement Note: As per government security norms, batteries would not be included in the kit.	14599	12499	10299
192	17	Automatic Wireless Health Monitoring System in Hospitals for Patients: Monitoring patient health remotely in hospitals over wireless from the patient bed to the doctor's chamber by RF with LCD display at both ends and optionally an alarm on critical situation.	14799	12599	10399
193	354	ARM Cortex (STM32) Based Auto Intensity Control: White Light Emitting Diodes (LED) replacing HID lamps in street lighting system with light dimming feature is interfaced to an ARM cortex (STM32) board used to develop pulse width modulated signals that drives a MOSFET to switch a number of LEDs for controling the intensity.	14899	12699	10499
194	372	Voice Controlled Robot by Cell Phone with Android App:Using Bluetooth mode of communication from any smart cell phone with Android app, voice commands are converted to logic data by a receiving Bluetooth module, forming as input to a 8051 microcontroller that enables 2 DC motors operation for the robot in desired direction through motor driver IC.	15099	12899	10599

195	373	Voice Controlled Home Appliances: Using Bluetooth mode of communication from any smart cell phone with Android app, voice commands are converted to logic data by the receiving Bluetooth module, forming as input to 8051 microcontroller that enables AC household mains loads through TRIACs interfaced through opto-isolators.	15099	12899	10599
196	224	Sine Pulse Width Modulation (SPWM): Aadaptive sine-weighted pulse width modulated output is generated by a programed microcontroller of 8051 family for developing a 50Hz sine wave three phase AC from single phase AC. Please note that a three phase induction motor can be procured at an extra cost over the kit cost.	15299	13099	10799
197	240	SVPWM Space Vector Pulse Width Modulation: Project is designed to generate 3 phase supply from single phase supply using 6 no's MOSFETs. It comprises of a 3 phase bridge inverter driven from a programable microcontroller (8051 family) through bridge drivers and opto-isolators. Single phase source is converted to DC which is used for the inverter. Please note that a three phase induction motor can be procured at an extra cost over the kit cost.	15299	13099	10799
198	364	Bi Directional Rotation of Single Phase Induction Motor without Run Capacitor: Developing 2 phase ac by 90 degrees phase difference to each other by converting ac to dc and again dc to ac by high frequency switching with help of MOSFETs driven from a microcontroller for any single phase induction motor to run in either direction without use of run capacitor.	15299	13099	10799
199	384	Wireless Home Appliance like Fan Speed Control using RF Communication: The project is designed to control AC power based on the principle of firing angle control by two thyristors connected in antiparallel or a TRIAC used in series with the fan which is an induction motor for speed control. Wireless mode of communication through a pair of RF transmitter receiver module is interfaced to the microcontrollers at either side for responding to the commands.	15299	13099	10799

200	415	The Temperature Humidity Monitoring System of Soil Based on Wireless Sensor Networks using Arduino: The project is designed to operate a pump for automatic irrigation. It comprises of moisture sensing arrangement interfaced to an op-amp configured as a comparator. So whenever moisture in the soil reduces, it turns the water pump ON. This results in increase of the moisture	15299	13099	10799
201	433	Patient health monitoring system with location details by GPS over GSM: Monitoring patient health remotely in hospitals over wireless from the patient bed to the doctor's chamber by RF with LCD display at both ends and optionally an alarm on critical situation.	15299	13099	10799
202	416	Arduino based Industrial Appliances Control System by Decoding Dual Tone Multi-Frequency Signals via GSM Network: The project works on the principle of DTMF (dual tone multi frequency) tone command so received from any cell phone to remotely switch any electrical load such as agricultural pump, domestic and industrial loads etc. This device uses an ARDUINO board interfaced to DTMF decoder for receiving tone commands to actuate loads from the output of the Arduino as per the program	15499	13199	10899
203	PIC113	Speed Synchronisation of Multiple Motors in Industries Using PIC Microcontroller: Multiple motors used in industries like textile mill, steel plant, papaer mill etc using conveyor belts needs the motors used to be synchronized. This is achieved by independent microcontrollers interfaced to each motor with speed sensing arrangement and keypad to enter speed. The project uses 3 motors for demonstration purpose.	15499	13199	10899
204	40	Tampered Energy Meter Monitoring Conveyed to Control Room by GSM With User Programmable Number Features: The main scope of this project is to send message from any tampered energy meter to be received by the control room by means of GSM modem by user programable number upon a mis-call . A message is sent to the same number stored in microcontroller to alert the tampering of the meter.	15699	13399	10999

205	157	Flash Flood Intimation over GSM with User Programmable Number Features to the Station Master: High water level detector interfaced to micro controller that outputs a signal to a GSM modem for sending an SMS to the station master through GSM by user programable number upon a mis-call to direct the train driver to stop the train.	15699	13399	10999
206	190	Railway Track Security by GSM with User Programmable Number Features: The system detects for breakage /crack in railway tracks using line loop current break to sense the same to send interrupt to the controller to send an SMS to the station master through GSM by user programable number upon a mis-call.	15699	13399	10999
207	201	Wireless Electronic Notice Board by GSM with User Programmable Number Features: The microcontroller receives the message from transmitter through GSM by user programable number upon a mis-call interface, to be displayed on the LCD at user end interfaced to the microcontroller.	15699	13399	10999
208	553	Home Automation under Wi-Fi through Android Apps from any Smart phone: Domestic / industrial loads controlled over Wi-Fi network through any smart phone having Android OS an IOT based project	15399	13199	10999
209	352	Arduino Based Home Automation: Using Bluetooth module interfaced an Arduino board is designed for controlling several loads in home or office for optimum use of energy.	15999	13599	11199

210	387	Wireless power transfer by High frequency resonating coils: Wireless power transfer by two high frequency resonating air cored coils operating at 40 KHz and spaced at distance of 20 CM lights up a 10 watt lamp with full brightness	15999	13599	11199
211	389	Smart Card Based Electronic Passport System: The system uses smart card technology to identify the authorized personnel and then process all the passport details pertaining to him/her, for necessary verification by authorities concerned.	15999	13599	11199
212	394	Arduino based Electrical Appliances Control using IR: Project uses a standard TV remote for electrical load control using an Arduino board. An IR receiver is interfaced to the Arduino board to read the coded data from the remote to activate the corresponding relay for the load to switch on or off. Lamps are provided as load for demonstration purpose.	15899	13599	11199
213	556	Remote Monitoring of Transformer / Generator Health over Internet: Real time parameters of any functioning transformer, generator, domestic / industrial load, displayed over internet upon a dedicated webpage either for private or public view in user selected chart format such as line type, bar type, pie chart, gauge type etc, an IOT based project	16199	13799	11399
214	154	Theft Intimation of the Vehicle over GSM by SMS with User Programmable Number Features To Owner Who Can Stop The Engine Remotely: Theft intimation of the vehicle over sms using GSM modem by user programable number upon a miscall, to the owner while unauthorized door entry is made. Owner can send command through his mobile to stop the engine by activating the relay interfaced to a microcontroller along with the GSM modem used for the purpose.	16199	13799	11399

215	223	Pre-Programmed Digital Scrolling Message System: The project is uses alphanumeric LED displays for scrolling message over it. This project can be used for advertisement purposes.	16599	14199	11699
216	378	Solar Water Pump Control with Four Different Time Slots for Power Saving Applications: .The project is designed to develop an automatic switching system for pump operation for multiple preset-time operation with an inbuilt real time clock (RTC) to keep tracking the time and switch on/off a relay whose contacts are used in series with another relay operated from a solar charge controller circuit with battery incorporating all protections such as overload / under voltage/ overcharging and deep discharging trip.	16899	14399	11899
217	PIC106	Vehicle Theft Intimation To The Owner On His Cell Phone By GSM With User Programmable Number Features (Using PIC Microcontroller): Theft intimation of the vehicle over SMS using GSM modem by user programable number upon a miscall to the owner while unauthorized door entry is made. Owner can send command through mobile to stop the engine whose ignition is disabled through a relay fed from the microcontroller which gets command from the GSM modem.	16899	14399	11899
218	368	GSM based Electricity Energy Meter Billing with Onsite Display: Domestic electricity consumed is displayed in per unit terms to the user and billing details are sent over GSM to the department for generating the printed bill. Unique feature of the project is that upon a missed call by the user to the GSM modem the number gets stored for subsequent communication.	17099	14599	11999

219	147	GSM Based Monthly Electricity Energy Meter Billing With SMS up on GSM with User Programmable Number Features Together with Onsite Display to the User: Domestic electricity consumed is displayed in rupee terms on daily and monthly basics to the user and billing details sent over GSM by user programable number upon a mis-call form the user to the department for generating the printed bill.	17199	14699	12099
220	146	Railway Level Crossing Gate Control through GSM by SSM with User Programmable Number Features by the Station Master or the Driver: Railway level crossing gate motor, controlled by the station master or the engine driver through GSM modem by user programable number upon a mis-call interfaced to microcontroller for deriving an output to dive a relay for the gate motor operation.	17299	14799	12199
221	382	Wireless DC Motor Speed and Direction Control for Robotic Applications: The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control) through RF interface using a microcontroller to deliver the PWM data to the transmitter for the receiver to operate the motor wirelessly.	17299	14799	12199
222	159	Integrated Energy Management System Based on GSM with User Programmable Number Features and Acknowledgement Features: An SMS sent through the cell phone to a distant location GSM modem by user programable number upon a miscall for any load interfaced from a micro controller through relay and relay driver to switch ON and switch OFF the same with acknowledgement sent back to the sender on SMS upon the action taken and the status of the load.	17499	14899	12299

223	386	Automated Irrigation System using a GSM modem: The project is designed to operate a pump for automatic irrigation. It comprises of moisture sensing arrangement interfaced to an op-amp configured as a comparator, the output of which is sent to a controller such that whenever moisture in the soil reduces, it turns the water pump on. Whenever it results in appropriate moisture content it switches off the motor. The above operations are monitored by 8051 family microcontroller.	17699	15099	12399
224	231	Speed Synchronisation of Multiple Motors in Industries: Multiple motors used in industries like textile mill, steel plant, papaer mill etc using conveyor belts needs the motors used to be synchronized. This is achieved by independent microcontrollers interfaced to each motor with speed sensing arrangement and keypad to enter speed. The project uses 3 motors for demonstration purpose.	17799	15199	12499
225	557	Energy Meter Reading over Internet: Energy meter reading on units consumed and cost thereof conveyed over internet upon a dedicated webpage for display on graphical format under IOT (Internet of things) project category.	17799	15199	12499
226	253	Auto Metro Train to Shuttle between Stations: A robotic vehicle considered as train is connected with sensors for shuttling between two stations automatically. It has provision for limiting the number of passengers entering the train by auto door management system. Auto start and stop feature from origin to the destination and back is also available.	18199	15499	12799
227	346	Wireless SCADA: Supervisor sitting on the PC terminal to control plant parameters wirelessly while monitoring the data acquired through several sensors. The project uses a front end for the control and a backend with microcontroller interfaced to an ADC from temperature sensors for data collection and control.	18199	15499	12799
228	370	Solar Inverter:MOSFET based Inverter 50Hz, 220 Volt AC powered by 12 Volt storage battery having charging features from solar photovoltaic cells optionally.	18199	15499	12799

229	377	Implementation of Solar Inverter for Home, Garden, Street Light Applications: MOSFET based Inverter 50Hz, 220 Volt AC powered by 12 Volt storage battery having charging features from solar photovoltaic cells optionally incorporating all protections such as overload / under voltage/ overcharging and deep discharging trip.	18199	15499	12799
230	356	ARM Cortex (STM32) Based Solar Street Light: LED based street lights with auto intensity control using solar power from photovoltaic cells duly interfaced to an ARM cortex (STM32) board. The project stores solar energy in a battery during day time and automatically operates street light in evening with varying intensity control to minimize waste of energy.	0	0	12899
231	425	Underground Cable Fault Distance Conveyed over GSM: A fixed set of resistors are used representing equivalent resistance pertaining to distance of an underground cable(in lieu of actual cable) in kilometers. A DC voltage is fed over the cable line in multiplexing mode in combination with an ADC to detect the fault current and show the distance on a LCD display based on voltage drop principle. The same information is transmitted to the authority over GSM interfaced to the microcontroller.	18499	15799	12999
232	558	Display of Underground Cable Fault Distance over Internet: Underground cable fault distance displayed over internet to any computer upon a dedicated webpage. The project is one of the IOT category using GSM modem and microcontroller.	18499	15799	12999
233	414	RFID based Electronic Passport System for Easy Governance using Arduino: RFID tag with details of the person keep tracking their passport details while swiped on the RFID reader interfaced to an Arduino board with LCD display for indication.	18799	15999	13199

234	180	Energy Meter Billing with Load Control over GSM with User Programmable Number Features: The project is to develop a wireless energy meter reading and load control. The reading of the energy meter is also sent by to any cell phone by a message through GSM modem by user programable number upon a mis-call which also receives commands from the cell phone to control the electrical loads.	18999	16199	13299
235	238	Touch Screen Based Home Automation System: A touch screen based transmitting unit is used to operate home appliances with zero voltage switching, remotely using RF communication to avoid complicated wiring in existing system and to improve life of the appliance under use.	18899	16099	13299
236	250	Solar Powered Auto Irrigation System: The project uses a solar powered pump operated automatically for irrigation purpose,on sensing the soil condition.By using solar power system, dependence on erratic commercial power is not required. A microcontroller of 8051 family is used to control the whole system. A motor is provided as load for demonstration purpose.	19399	16499	13599
237	366	Detecting Power Theft prior to feeding energy Meter and Intimating to Control Room by GSM: The main scope of this project is to send message from any energy meter facing power theft, to be received by the control room by means of GSM modem. Unique feature of the project is that upon a missed call by the user to the GSM modem the number gets stored for subsequent communication.	19299	16499	13599
238	411	Arduino based RFID Sensed Device Access: RFID system is used to authorize the tag holder to enter a secure area. The RFID reader reads the data present on the RFID tag. This data is compared in an Arduino board to match the built in data for status display and authorizing the entry which is indicated with a lamp coupled with an LCD display.	19399	16499	13599

239	367	Prepaid Energy Meter with GSM Interface: The main scope of this project is to send message through GSM modem to the control room from an energy meter having prepaid arrangement initiated by the user upon a set of switches (for demo purposes) in lieu of a prepaid card for the desired amount. The power gets disconnected automatically on zero balance. Unique feature of the project is that upon a missed call by the user to the GSM modem the number gets stored for subsequent communication.	19599	16699	13799
240	347	Wireless Rash Driving Detection: The time difference between 2 consecutive spots on a highway is sensed & fed to a programmed microcontroller to convert the same to the speed of a vehicle with display & warning upon exceeding specified speed limit and transmitting the same wirelessly to the control room.	20699	17599	14499
241	365	Wireless Power Driven Car or Train:The project is designed to transfer power wirelessly to 2 DC motors for electric car, train without any fuel or battery or electrical connection, to run in a specified path by inductive resonance coupling at ground level fixed coil developing 40KHz power from 50 Hz mains AC source. This project can also be used for high power charging of batteries in conventional electric cars wirelessly while even running on the road.	21599	18399	15199
242	310	Vehicle Tracking by GPS - GSM: Location tracking of any vehicle with latitude and longitude details communicated to the owner over SMS at periodical intervals by a tracking microcontroller duly interfaced to a GPS module and a GSM modem installed in the vehicle.	22599	19299	15899

243	407	Arduino Operated Obstacle Avoidance Robot: Ultrasonic sensor based robotic vehicle that avoids any obstacle and changes its direction as required. An ARDUINO board with input from the sensor is used to feed a motor driver IC for the motors to achieve the desired function. Note: As per government security norms, batteries would not be included in the kit.	22599	19299	15899
244	322	Xbee Based Remote Monitoring of 3 Parameters on Transformer / Generator Health with Voice Announcement and Wireless PC Interface: 3 parameters such as voltage, current, temperature of a transformer or any other live equipment is monitored remotely over XBEE communication to remote terminal with relay control board at the receiver end in the event of abnormal parameters encountered with recorded voice announcement and with wireless computer interface for display.	23499	19999	16499
245	392	Zigbee based Automatic Meter Reading System: Domestic electricity consumed is locally displayed on LCD in terms of Rupees and units to the user and is also sent over wireless communication to a nearby PC using a pair of 2.4GHz transceivers.	25099	21399	17599
246	357	RaspberryPI Based Auto Intensity Control: White Light Emitting Diodes (LED) replacing HID lamps in street lighting system with light dimming feature is interfaced to aRaspberry Pi board used to develop pulse width modulated signals that drives a MOSFET to switch a number of LEDs for controling the intensity.	22499	19499	18099
247	333	Pick N Place Robotic Arm and Movement Controlled by Android Wirelessly: The project is designed to develop a pick n place robotic vehicle with a soft catching gripper. For example, it can safely handle a bomb very carefully to avoid explosion while catching. The robotic vehicle 4 motors are interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications.	25899	22099	18199

248	152	Fire Fighting Robotic Vehicle: The project is designed to develop a fire fighting robot using RF technology for remote operation. The robotic vehicle is loaded with water tanker and a pump which is controlled over wireless communication to throw water. An 8051 series of microcontroller is used for the desired operation.	26899	22899	18899
249	379	Farmer Friendly Solar Based Electric Fence for Deterring Cattles: MOSFET based Inverter 50Hz, 220 Volt AC powered by 12 Volt storage battery having charging features from solar photovoltaic cells is used along with a voltage multiplier developing 2KV feeding the fence around the farmer field to inject mild shock to encroaching cattle for protecting the crop from damage.	27199	23199	19099
250	153	War Field Spying Robot with Night Vision Wireless Camera: The project is designed to develop a robotic vehicle using RF technology for remote operation attached with wireless camera for monitoring purpose. The robot along with camera can wirelessly transmit real time video with night vision capabilities. This is kind of robot can be used for spying purpose in war fields. An 8051 series of microcontroller is used for the desired operation.	27199	23199	19099
251	334	Fire Fighting Robot Remotely Operated by Android Applications: The project is designed to develop a fire fighting robotic vehicle using motors those are interfaced to a microcontroller through remotely operated commands to it by touch screen based user friendly GUI on any smart phone with Android applications. The robotic vehicle is loaded with water tanker and a pump which is also controlled remotely too pump the water on the fire.	27399	23299	19199

252	255	Touch Screen Based Remote Controlled Robotic Vehicle for Stores Management: The project is designed to control a robotic vehicle with a touch screen display unit for remote operation. The touch screen remote control is used at the transmitting side to transmit RF control signals. At the receiving end, a pick n place robotic vehicle is used to respond to those signals and perform the task. An 8051 series of microcontroller is used for the desired operation.	27499	23399	19299
253	335	War Field Spying Robot with Night Vision Wireless Camera by Android Applications: The project is designed to develop a robotic vehicle—using motors those are interfaced—to a microcontroller through remotely operated commands to it—by touch screen based user friendly GUI on any smart phone with Android applications and with wireless camera for monitoring purpose. The robot along with camera can wirelessly transmit real time video with night vision capabilities. This is kind of robot can be used for spying purpose in war fields.	28799	24499	20199
254	358	RaspberryPI Based Motor Speed Control:The speed of a DC motor is directly proportional to the voltage applied across its terminals. This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). A Raspberry Pi board is used to deliver the PWM pulses to the motor.	28999	24699	20299
255	359	RaspberryPI Based Programmable Sequential Switching: The project is based on RaspberryPI board for programmable logic control of industrial loads by the user. A keyboard is interfaced to the Raspberry PI module which can be used to program the system in set mode, auto mode or manual mode. Loads are driven sequentially or individually in programmable time intervals from the output of the Raspberry PI module based on the mode selected.	29399	24999	20599

256	151	Pick N Place with Soft Catching Gripper: The project is designed to develop a pick n place robotic vehicle with a soft catching gripper. For example, it can safely handle a bomb very carefully to avoid explosion while catching. The robotic vehicle is RF controlled for remote operation. An 8051 series of microcontroller is used for the desired operation.	29499	25099	20699
257	362	Vehicle Theft Location Intimation by GPS/GSM to the Owner: Location tracking of any stolen vehicle with latitude and longitude details communicated to the owner over SMS at periodical intervals by a tracking microcontroller duly interfaced to a GPS module and a GSM modem installed in the vehicle.	29699	25299	20799
258	360	RaspberryPI Based Solar Street Light: LED based street lights with auto intensity control using solar power from photovoltaic cells duly interfaced to a Raspberry Pi board. The project stores solar energy in a battery during day time and automatically operates street light in evening with varying intensity control to minimize waste of energy.	30899	26299	21699
259	317	GSM Based Remote Monitoring of 8 Parameters of Transformer: GSM based remote monitoring of 8 parameters of transformer / generator health- 8 parameters such as 3 P voltage, 3p current, temperature, oil chamber moisture / oil level /vibration(any one of three) etc of distribution transformer / generator / other.	36099	30699	25299
260	324	Voice Controlled Robotic Vehicle with Long Distance Speech Recognition: A robotic vehicle that responds to voice commands with RF mode communication for long distance speech recognition features for movement in any direction with manual override by switches at the transmitter end.	42899	36499	30099

261	725	Humanoid Robot: A simple humanoid robot actuated by 4 servo motors having 2 degree of freedom per leg operated from a computer software through an AVR based controller board to enable it walk forward, backward, take turns and even do dancing.	0	11999	0
262	726	Remote Controlled Drone with Built in Camera: Project Drone is a small 4 propeller based highly manageable flying machine with an on board video camera and SD card storage facilities of the image / videos which can be used for spying purposes.	0	11999	0
		5-in-1, Solderless Projects			
263	625	Lucky number game: Electronic dice for lucky number game	0	0	2099
264	627	Voltage doubler: Using low voltage batteries to operate high voltage gadgets	0	0	2099
265	601	Night sensing light: Light sensing in darkness to trigger buzzer alarm for burglar using any touch	0	0	2199
266	602	Overhead water tank level indicator: Three level LED indication of water level in overhead water tank	0	0	2199
267	603	Discotheque flashing light: High speed flashing stroboscopic light with LEDs for discotheque	0	0	2199
268	604	Fire alarm system: Thermister based temperature sensing with LED indication	0	0	2199
269	606	Touch point based calling bell: Very sensitive touch plate controlled buzzer sound based calling bell	0	0	2199

270	607	Automatic toilet delay lighting: Once the light is wsitched on by a push button it automatically switches off after pre set time	0	0	2199
271	608	Police siren: Electronics way of generating police siren with adjustable dual 555 timers	0	0	2199
272	609	Kitchen timer: Agjustable Count down timer with LED indication for kitchen use	0	0	2199
273	621	Smart security reminder: Digital NAND gate based time elapsed alarm system to catch thieves	0	0	2199
274	605	Buzzer based Thermometer for Body Temperature: IC based body temperature limt cross warning for patients	0	0	2299
275	630	Smart Cash box guard : Electronic eye guarding cash boxes	0	0	2299
276	610	LED dimmer: Dimming the intensity of LEDs by PWM switching	0	0	2399
277	611	Police lights: 2 sets of different flashing LEDs mimiking police lights mounted on their vehicles	0	0	2399
278	628	Window glass break alarm: Protecting window glass break burglary attempt	0	0	2399
279	632	TV Remote Battery low detector: Detecting dischargeed battery in TV remotes	0	0	2399
280	626	Fastest finger fast test: 4 player fastest reaction in quiz competition	0	0	2499

281	631	Foot step activated Door bell: A door bell that works on approaching foot steps	0	0	2499	
282	622	Consumer visit audit: Counting visitors to limit entry beyond capacity	0	0	2699	
283	623	Dengu prevention: Generating irratating noise to deter dengu mosquitos	0	0	2699	
284	629	Toy motor speed control : Adding an accletorToy car motor	0	0	2899	
285	612	Smart fan: A small dc fan operates s long as any person sits on the chair fitted with IR sensors	0	0	3299	
286	624	Cell charger cum emmergency light: Automatic operation of emergency light using cell phone charger	0	0	4499	
3-in-1, Modular Projects						
287	804	Electronic eye / Auto window closing motor / Auto outdoor light: This project is designed for security purpose to monitor and protect our homes, banks, shops from burglary attempt.	0	0	1599	
288	808	Post box mail drop alarm / Railway gate motor operation / Auto door open light This project is designed for door open indication of house or industry ensuring proper locking.	0	0	1599	

289	801	Fire detection with alarm sound / Light indication / Air blow motor This project is designed to detect the active fire for protection	0	0	1609
290	809	Noise limit cross warning / Auto door close motor on bang sound / Pin drop silence LED This project is designed for detecting noisy or irritating sounds in prohibited areas like hospitals.	0	0	1609
291	806	Excess height limit warning / Smart fan in office / Cellar parking full LED indication This project is designed for indication purpose in cellar parking where vehicle can be parked or not.	0	0	2299
292	811	Bike theft alaram / upside down indicator for fragile item / Toll gate auto light LED This project is designed to generate an alarm when a bike is subjected to theft.	0	0	2299
293	803	Costal area humidity alarm / Aircooler water motor control / Industrial climate indication This project is all about controlling the air cooler from high humidity whenever required.	0	0	2599
294	810	Excess computer heating warning / Auto exhaust fan / Gyser water heat indicator This project is designed for monitoring the green houses for maintaining the temperature.	0	0	2599
295	802	Cooking gas leak with alarm / Toxic gas exhaust motor / Drunk driver warning light This project is designed for detecting pollution limit in atmosphere to save from harmful effects propagated.	0	0	2699
296	807	Security area protecting alarm /Auto door opening motor / Human detection uder debries This project is designed for security purpose in restricted or prohibited area where no unauthorized person is allowed.	0	0	2699

297	813	Museum watch dog /Auto water tap motor / car rear parking limit indication This project is designed for automobiles for a support to parking the vehicle in backward direction.	()	0	2699
298	812	Security protection for museum items / Touch controlled fan / Touch me not LED warning This project is designed for security in museums for visitors not to touch museum stuffs.	0	0	2999
299	805	Rain alarm / Auto plant watering / Soil dry or wet light indication This project is designed for automatic plant watering based on soil moisture condition to switch ON/OFF a pump motor.	0	0	3099

www.edgefxkits.com I info@edgefxkits.in I +91 99591 78000 I +91 99087 78000 Toll Free No: 1800 108 7475