







Product breakdown structure for the Final Product

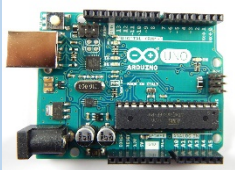

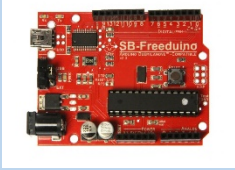
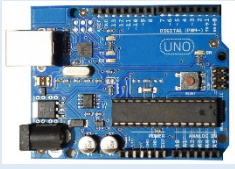
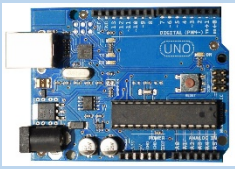
SIM 900 GSM Module

Product Name	Image	Price	Pros	Cons
SIM900A GSM MODEM MODULE with Wire ANTENNA (TTL OUTPUT)		799.00 (789.00 for 10 or more products) Elementz.com 849.00 Amazon.in -Refer 1. And 2. in References	<ul style="list-style-type: none"> - No external Adapters required - No unnecessary connector like RS 232. - Small size 	<ul style="list-style-type: none"> - Wire type Antenna (Least signal receptivity of all types of antennas)
SIM900A GSM MODEM MODULE with SMA ANTENNA (RS232, TTL, I2C OUTPUT)		999.00 (989.00 for 10 or more products) Elementz.com 1069.00 Amazon.in - Refer 3. And 4.	<ul style="list-style-type: none"> -SMA antenna provides better range 	<ul style="list-style-type: none"> - 12V External adapter is required - Size is 2 times the size of Arduino
SIM900A GSM/GPRS Serial & TTL Modem		900.00 Graylogix Amazon.in -Refer 5	<ul style="list-style-type: none"> -UFL Antenna (better range than wire antenna) 	<ul style="list-style-type: none"> - 12V External adapter is required - Not as aesthetically appealing as SMA antenna (and also range?)
SIM 900A GSM/GPRS MODEM with SMA ANTENNA		1500.00 S.P laboratory	<ul style="list-style-type: none"> - 6-9V Adapter Required - Dimensions comparable to Arduino 	<ul style="list-style-type: none"> - High Cost
Robomart SIM900 GPRS / GSM Module Arduino Compatible		3500.00 ROBOMART Amazon.in - Refer 6	<ul style="list-style-type: none"> -Direct compatibility with Arduino 	<ul style="list-style-type: none"> - High Cost
Geeetech GPRS/GSM SIM900 Shield Board for Arduino - Green		2352.00 Geetech dx.com - Refer 7.	<ul style="list-style-type: none"> -Direct compatibility with Arduino 	<ul style="list-style-type: none"> - High Cost - PCB antenna

REFERENCES

1. http://www.amazon.in/ELEMENTZ-SIM900A-MODEM-MODULE-ANTENNA/dp/B00SPQXJF4/ref=sr_1_6?ie=UTF8&qid=1432707186&sr=8-6&keywords=sim+900
2. <http://elementzonline.com/gsm-gps-rf-wireless/sim900a-gsm-modem-module-with-wire-antenna-ttl-output--156>
3. http://www.amazon.in/ELEMENTZ-SIM900A-MODEM-MODULE-ANTENNA/dp/B00LE7VHMS/ref=sr_1_1?ie=UTF8&qid=1432707186&sr=8-1&keywords=sim+900
4. <http://elementzonline.com/gsm-gps-rf-wireless/sim900a-gsm-modem-module-with-sma-antenna-rs232-ttl-i2c-output--74>
5. http://www.amazon.in/SIM900A-GSM-GPRS-Serial-Modem/dp/B00T5MTQJA/ref=sr_1_3?ie=UTF8&qid=1432707186&sr=8-3&keywords=sim+900
6. http://www.amazon.in/Robomart-SIM900-Module-Arduino-Compatible/dp/B00QQ6Y79C/ref=sr_1_1?ie=UTF8&qid=1432707638&sr=8-1&keywords=Robomart+SIM900+GPRS+%2F+GSM+Module+Arduino+Compatible
7. <http://www.dx.com/p/geeetech-gprs-gsm-sim900-shield-board-for-arduino-green-377853>



ARDUNIO MICROCONTROLLER

Product Name	Image	Price	Pros	Cons
Arduino UNO R3 - (Original Made in Italy)		1289.00 Elementz.com 1499.00 Amazon.in 1575.00 simplelabs.co Refer 1,2 and 3 in REFERENCES below	-Made by the company (Arduino - Italy) -Build quality assurance	-High Cost
Funduino UNO R3 Development Board		781.57 dx.com 689.20 (IF 10+ units are shipped) Refer 4.	-Same dimensions as the Arduino Uno. - Low cost	-Assembled in china based on the open source document provided by the company (Arduino – Italy)
Freeduino UNO Development Board		500.00 OM Technologies	-Slightly bigger than the Arduino Uno	-Assembled in India based on the open source document provided by the company (Arduino – Italy)
XRduino R3 Development Board		699.00 dx.com 615.82 (IF 10+ units are shipped) Refer 5.	-Same dimensions as the Arduino Uno. - Low cost	-Assembled in china based on the open source document provided by the company (Arduino – Italy) -(lower quality than Funduino ?)
DCCduino R3 Development Board		457.94 dx.com 403.54 (IF 10+ units are shipped) Refer 6.	-Same dimensions as the Arduino Uno. - Very Low cost	-Assembled in china based on the open source document provided by the company (Arduino – Italy) -Extra Driver has to be flashed

REFERENCES

1. http://elementzonline.com/arduino?product_id=154
2. http://www.amazon.in/Arduino-UNO-R3-Original-Italy/dp/B00WSKMZF8/ref=sr_1_4?ie=UTF8&qid=1432707202&sr=8-4&keywords=arduino+uno
3. <http://www.simplelabs.co.in/content/arduino-uno>
4. <http://www.dx.com/p/funduino-uno-r3-atmega328-development-board-for-arduino-384207>
5. <http://www.dx.com/p/uno-r3-development-board-microcontroller-mega328p-atmega16u2-compatible-for-arduino-blue-black-215600>
6. <http://www.dx.com/p/dccduino-atmega328-development-board-for-arduino-uno-r3-blue-340374>

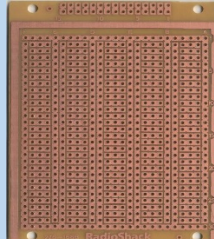
JUMPER WIRES

Product Name	Image	Price
JUMPER WIRE MALE TO MALE		180.00 Amazon.in 120.00 NXT Electronics
JUMPER WIRES FEMALE TO MALE		170.00 Amazon.in 90.00 OM technologies

REFERENCES

1. http://www.amazon.in/Jumper-Wire-male-40-Pcs/dp/B00SJHYN4K/ref=sr_1_1?ie=UTF8&qid=1432707248&sr=8-1&keywords=jumper+wires+male+to+male
2. http://www.amazon.in/Female-40-Pin-DuPont-Breadboard-Jumper/dp/B00O8YCPHA/ref=sr_1_1?ie=UTF8&qid=1432707972&sr=8-1&keywords=jumper+wires+male+to+male+dupont





PERF BOARDS

Product Name	Image	Price
PERF BOARD		8.00 OM Technologies

DISCRETE ELEMENTS

Product Name	Image	Price
330ohm (4), 33ohm (2), 1microfarad (2)		8.00 OM Technologies
Adapter Socket		7.00 OM Technologies
3.5 mm Audio Jacket		15.00 NXT Electronics
Single Strand wire		25.00 OM Technologies

ADAPTER

Product Name	Image	Price
7.0V 3.5A		350.00 Anmol Electronics
7.5V 2.8A		350.00 Anmol Electronics
12V 1A		140.00 OM technologies
6V 1A		180.00 Anmol Electronics

CT SENSORS

Product Name	Image	Price
CT 013 CURRENT TRANSFORMER		584.30 516.24 (If 10+ Devices are shipped) dx.com Refer 1. in REFERENCES below

REFERENCES

1. <http://www.dx.com/p/sct013-0-100a-non-invasive-ac-current-sensor-split-core-current-transformer-blue-359292#.VVn0J9qqqko>

NOTES

- All images do not represent the exact product.
- This document is just a proposal of parts for the final product AND it's not a final statement.
- A Final Product Will be Built based on Options decided by the Company.
- Price of the final product will be calculated based on the Selection of parts.