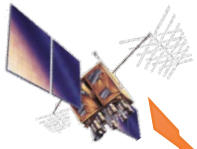
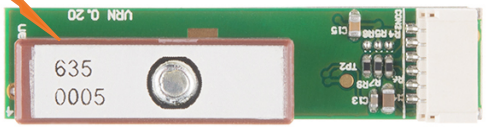
The BIGLED Wall Clock



Air Force's ninth Block IIF-09 navigation satellite for the Global Positioning System



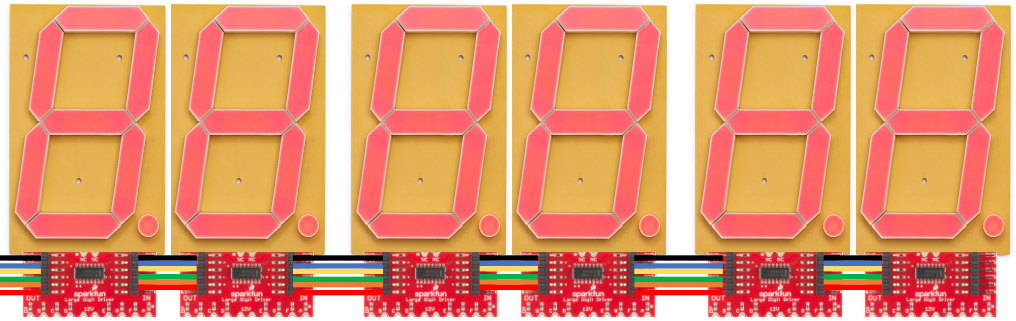
[56-Channel GPS Receiver - GP-735 (Sparkfun GPS-13670)]

1. Need Power – The microprocessor and peripherals run on 5v but the BIGLED digits needs 12V at up to 300ma with all digits lit (6x300 = 1.8A needed just for the digits

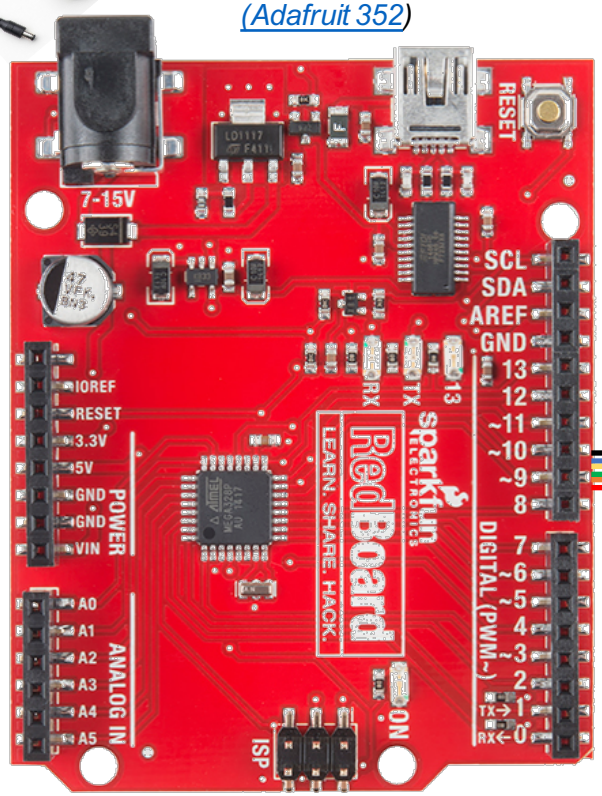
[12V 5A Switching Power Supply (Adafruit 352)]

2. Sets clock module first time and periodically updates. The GPS module delivers ultra accurate time - a byproduct necessary to deliver provide positioning

6.5" 7-Segment Displays (Sparkfun COM-08530)



[Large Digit Driver using TI TPIC6C596 Power Logic 8-Bit Shift Register chip (Sparkfun 13279)]

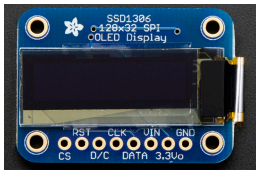


[Arduino UNO rev3 8-bit microprocessor based on the Amtel ATmega328P processor (Sparkfun Redboard 12757)]

3. Clock module holds the time with 9 year battery backup

[Extremely Accurate I²C-TCXO/ based clock module using Maxim DS3231 I2C Bus Accuracy ±2ppm from 0°C to +40°C]

4. Ultra low power OLED display for backup and GPS time setting



[128x32 SPI OLED graphic display (Adafruit 661)]

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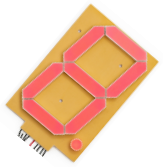
The BIGLED Wall Clock

So what did the basic electronics cost and did they come from?





Schedule of Components	Stock No.	#	Ea.	Total
SparkFun 6" 7-segment LED	COM-08530	6	$14.95	$88.70
SparkFun Large Digit Driver	WIG-13279	6	$6.95	$41.70
SparkFun RedBoard - Programmed with Arduino	DEV-12757			$19.95
SparkFun GPS Receiver - GP-735 (56 Channel)	GPS-13670			$39.95
Adafruit Monochrome 128x32 SPI OLED graphic display	661			$17.50
Adafruit Chronodot v2.1	255			$17.50
SparkFun USB Mini-B Cable - 6 Foot	CAB-11301			$3.95
SparkFun Jumper Wire - 0.1", 6-pin, 12"	PRT-10376	2	$1.95	$3.90
SparkFun Jumper Wire - 0.1", 6-pin, 4"	PRT-10366	6	$0.95	$5.70
Adafruit 12V Power Supply 5a Power Supply	352			$24.95
SparkFun Arduino and Breadboard Holder	DEV-11235			$3.95
SparkFun Breadboard - Self-Adhesive (White)	PRT-12002			$4.95
SparkFun GPS Breakout	BOB-11818			$3.95
Sparkfun JST SH Jumper 6 Wire - 1 Foot	GPS-09123			$2.95
Shop - wires, shipping, sales tax			12%	$41.94
				$321.54





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