

FGPMMOPA6H GPS Breakout Board v1.1

Simple breakout board for the FGPMMOPA6H GPS module

- To use with a 5V FTDI cable, orient cable with RESET (green) at pin 1 on J1.
- To use with 5V controllers, connect VCC, 5V_RX, 5V_TX, and GND.
- To use with 3.3V controllers, connect VCC, 5V_RX, 3.3V_TX, and GND.

1PPS, RTCM, and the FIX are 3.3V-level signals and may not be interpreted correctly by a 5V system.

Notes on 3.3V/5V compatibility

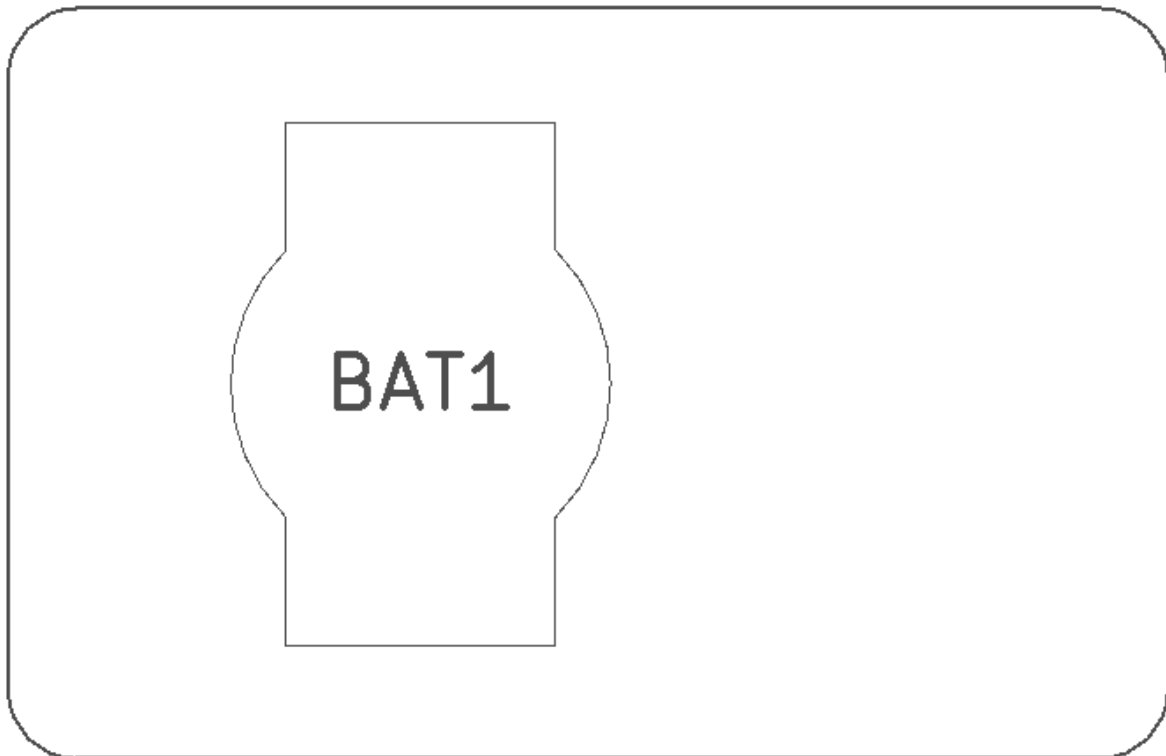
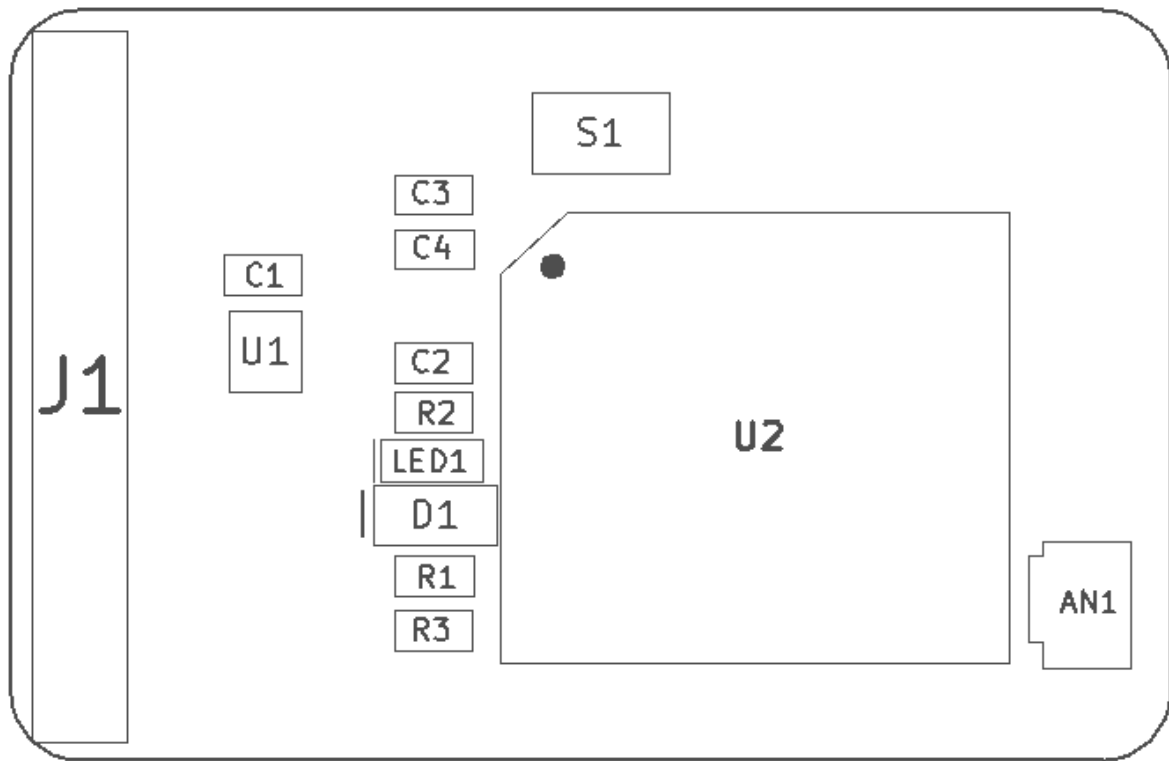
- Atmega328 provides output signals above 4.2V for HIGH and below 0.9V for LOW.
- Atmega328 detects input signals above 3V as HIGH and below 1.5V for LOW.
- The FGPMMOPA6H provides output signals 2.0-3.3V for HIGH and 0-0.8V for LOW.
- The FGPMMOPA6H detects input signals 2.4-3.3V for HIGH and 0-0.4V for LOW.

Bill of Materials

Ref	Qty	Description	Digikey PN
AN1	1	CONN UFL JACK STR 50 OHM SMD	H122041-ND
BAT1	1	CR1220 BATTERY HOLDER SMT FLATPIN	BK-916-CT-ND
C3 C2 C1	3	CAP CER 1UF 10V X7R 0603	1276-1946-1-ND
C4	1	CAP CER 0.01UF 50V X7R 0603	490-1512-1-ND
D1	1	DIODE GEN PURP 75V 250MA 1N4148 SOD123	1655-1360-1-ND
J1	1	HEADER MALE 10POS TH 1x10 0.1"	952-1902-ND
LED1	1	LED AMBER DIFFUSED 0603 SMD	475-2712-1-ND
R1	1	RES SMD 10K OHM 1% 1/8W 0603	RNCP0603FTD10K0CT-ND
R3 R2	2	RES SMD 470 OHM 5% 1/4W 0603	RHM470DCT-ND
S1	1	SWITCH TACTILE SPST-NO 0.05A 12V	SW1020CT-ND
U1	1	IC REG LDO 3.3V 0.15A SOT353	576-3193-1-ND

Ref	Qty	Description	Adafruit PN
U2	1	GPS MODULE PA6H MTK3339	790

FGPMMOPA6H GPS Breakout Board v1.1 Assembly Diagram Top View



FGPMMOPA6H GPS Breakout Board v1.1 Assembly Diagram Bottom View

