



Spartan 2 OEM Manual

Read First:

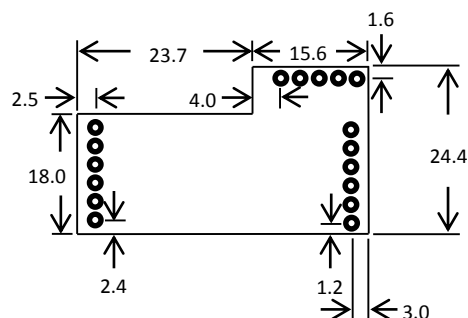
Spartan 2 OEM has Linear Output, Simulated Narrowband Output, and LED output, it does not have I2C communications.

Specifications:

Spartan 2 OEM Specifications:

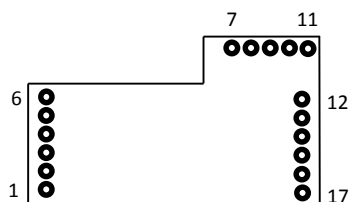
- Dimensions: 40mm x 24mm
- Compatible with Bosch LSU 4.9
- Utilizes Bosch LSU 4.9's built in calibration resistor; does not require Free Air Calibration
- Manufactured with all High Temperature Automotive Qualified (AEC Q100) components
- Accuracy: 0.01[Lambda]
- Typical Response Time, Free Air to 0.8[Lambda]: 150[ms]
- Integrated Power Supply Over-Voltage, Over-Current, and Reverse Polarity Protection
- Outputs: Linear Output, Simulator Narrowband Output, LED Output to show sensor temperature
- Integrated 5v Power Supply
- Operating Voltage 8[V] to 18[V]
- Typical 12[V] Operating Current: 1[A]
- Max 12[V] Operating Current: 3[A]
- Operating Temperature: High Temperature, -40[C] to +125[C]
- Lambda Range Linear Output: 0[V] @ 0.68[Lambda] linear to 5[V] @ 1.36 [Lambda]
- Narrowband Switch Point @ 1[Lambda]

Dimensions:



All dimensions in mm. All pinheader pitch is 2.54mm.

Pinout:



Pin #	Name	Note
1	LSU IA	Connects to LSU terminal without wire
2	LSU H+	Connects to Grey wire on LSU
3	LSU IP	Connects to Red wire on LSU
4	LSU UN	Connects to Black wire on LSU
5	LSU H-	Connects to White wire on LSU
6	LSU VM	Connects to Yellow wire on LSU
7	5v	Leave disconnected
8	Ground	Leave disconnected
9	XRES	Leave disconnected
10	I2C SCL	I2C communications, not available on Spartan 2 OEM, only available on Spartan 2 OEM I2C
11	I2C SDA	I2C communications, not available on Spartan 2 OEM, only available on Spartan 2 OEM I2C
12	12V	Connects to 8[V] to 18[V] power source capable of supplying 3[A], a 5[A] inline fuse should be used.
13	E Ground	Electronics ground, 100[mA] max
14	H Ground	LSU Heater Ground, 3[A] max
15	NB Out	Simulated Narrowband Output for Spartan 2 OEM
16	Lin Out	Linear Output for Spartan 2 OEM, 0[V] @ 10[AFR] linear to 5[V] @ 20 [AFR], 1k output impedance
17	LED	Heater Status LED output, LED Off = too cold, LED blink = too hot, LED solid = just right (780[C] +/- 25[C])