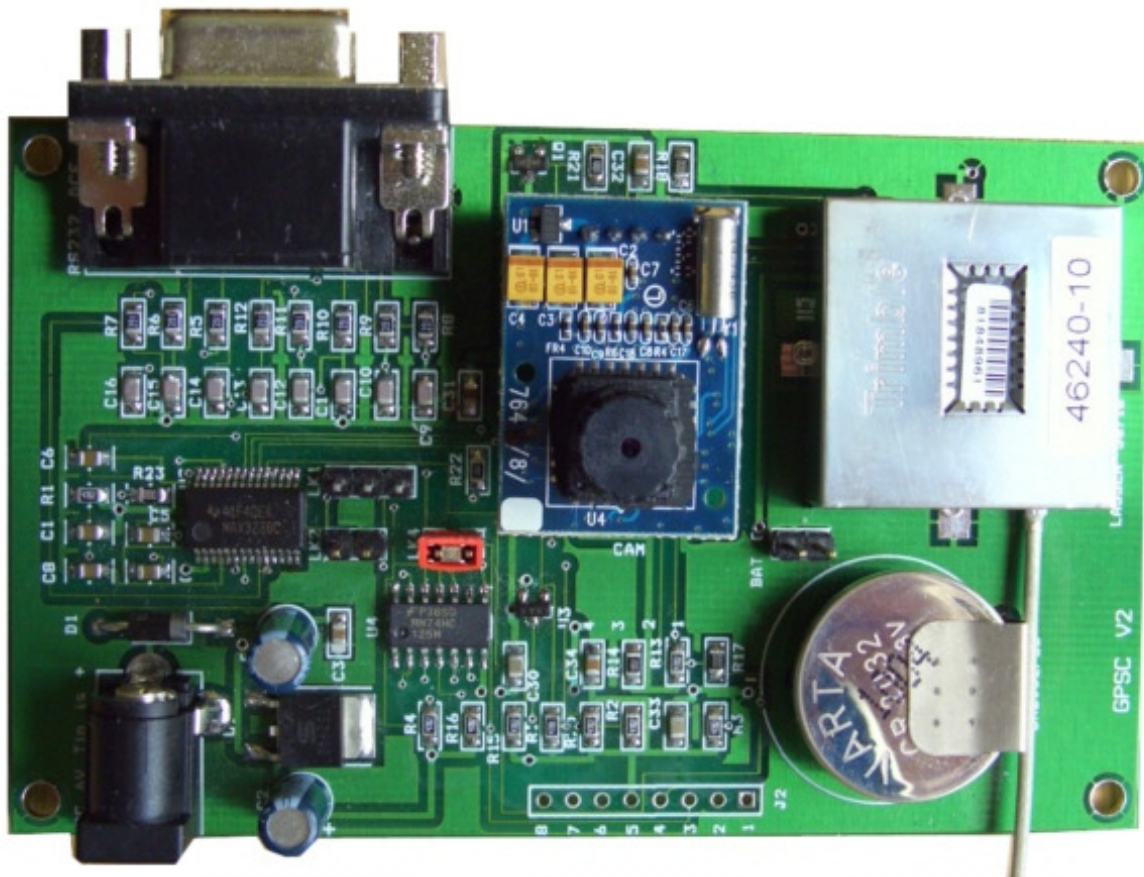


GPS/Cam Evaluation Board Quick Start Guide



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1 General

This evaluation board can be used for GPS module Lassen IQ, but for CMOS camera CAM-VGA100 as well.

Camera CAM-VGA100



GPS module Lassen IQ



2 Supply voltage

The input voltage should be 4.5V – 6V.

Input power should be off before plugging in the GPS module or camera.

3 GPS module Lassen IQ

If you evaluate a Lassen IQ, then please follow the guide line as below, else jump to chapter number 4 (CMOS camera CAM-VGA100).

Link pins 1 & 2 of **LK1** to select the NMEA channel.

No link LK2.

No link BAT for the GPS backup battery.

Link pins of **LK 4** to enable power to the GPS receiver.

Connect HFL transition cable to Lassen receiver.

Plug in the Lassen GPS receiver.

Link BAT for the GPS backup battery.

Connect a straight-through 1 to 1 cable between your PC and the evaluation board.

Power on the evaluation board.

Using HyperTerminal or similar you will now see the NMEA output from the GPS receiver.

LK1**No links**

Enables the TSIP input and output on pins 2 & 3 of RS232 connector. You should use this mode when using the GPS evaluation software and the camera evaluation software. If you want to see the NMEA output it is available on Pin1 of the RS232 connector.

1 & 2

Enables NMEA output on pin 2 of RS232 connector.

2 & 3

RTS from PC controls TSIP or NMEA output.

LK2

Link OFF enables RS232 transceiver. Keep this off for normal operation.

Link ON disables RS232 transceiver. This will stop all data in/out to RS232 connector.

BATT

Link ON connects the Lithium backup battery to the GPS receiver.

You'll need this ON to get a quick fix after power off.

Link OFF disconnects the Lithium backup battery to the GPS receiver.

LK4

Link ON enables power to the GPS receiver and camera.

Link OFF power is controlled by the DTR line from the RS232 connector.

4 CMOS camera CAM-VGA100

LK1

No link

LK2

No link (If linked disables RS232 transceiver)

LK3

Don't care

LK4

Link to enable power to camera.

(Unlink if you want to control power with DTR input.)

The VGA100 plugs into the 4 way socket. The outline of the camera shows the orientation.

Use a straight-through 1 to 1 cable from PC to evaluation board.

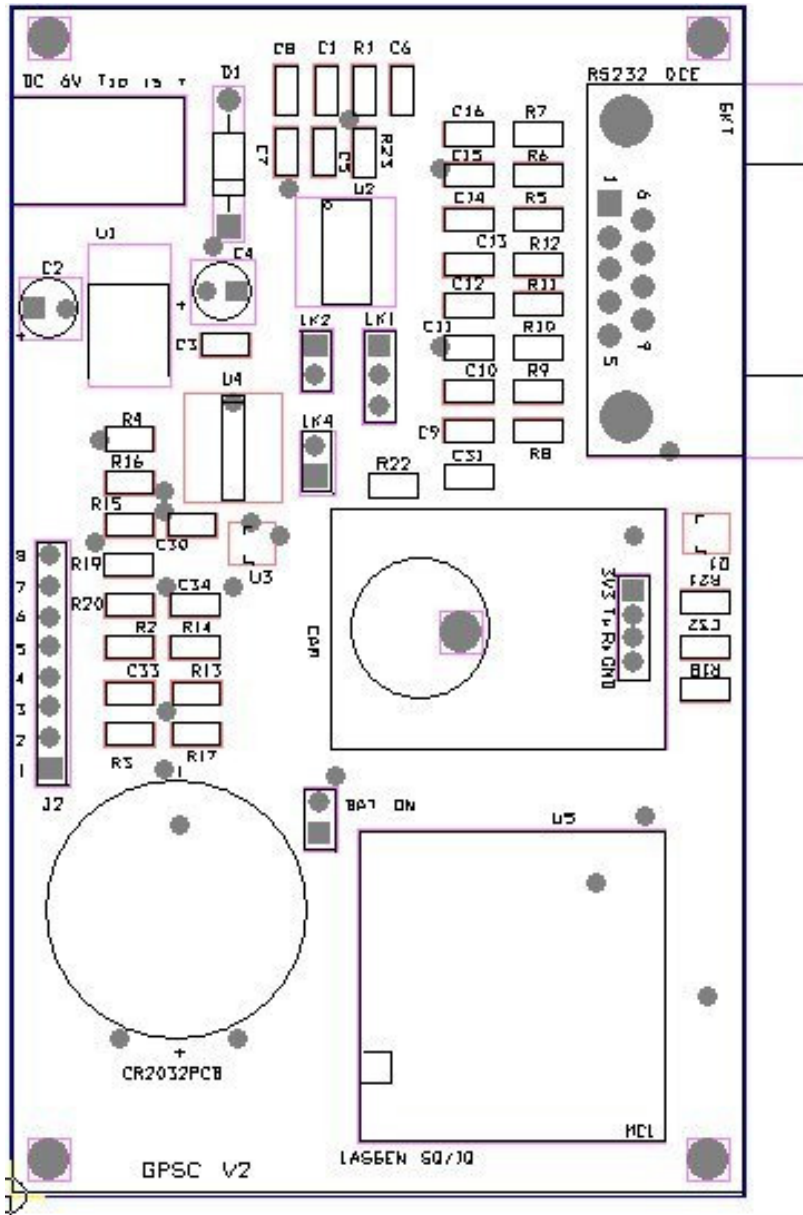
The Round Solutions test software can be used to test the camera at various JPEG resolutions.

NOTE

You cannot normally have the camera and GPS connected at the same time.

If this is a requirement then you'll need to remove R17 and R18. You will not then have the TSIP available, only the NMEA output and camera. The GPS TSIP and camera share the same channel.

5 GPS/CAM Evaluation board Top View



GPS/CAM Evaluation board 100 x 62mm

6 GPS/CAM Evaluation board Pin out

RS232 Connector Pin out

1	NMEA output	Always available
2	TSIP/NMEA/Camera output	Selectable by link or RTS
3	Data input	
4	DTR input	Power control
5	Ground	
6	TSIP output	Always available
7	RTS input	Channel control
8	CTS output	Always ON
9	PPS output	1 sec PPS signal from GPS

J1 DC IN

TIP	+4.5 – 6V	
RING	Ground	

7 Schematic diagram (small resolution)

Higher resolution in separate PDF file GPS-CAM-EVAL.PDF

