

EI Labs India Pvt. Ltd.

Embedded Devices



LinEval Accessories

Product Technical Information

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NOTE

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Optional Supported Accessories Available for Lin_Eval_boards from EI LABS

The following are the optional accessories that are available and compatible with the Lin_Eval_v2.0 and Lin_eval_v1 boards. These are available from EI Labs India Pvt Ltd at additional cost.

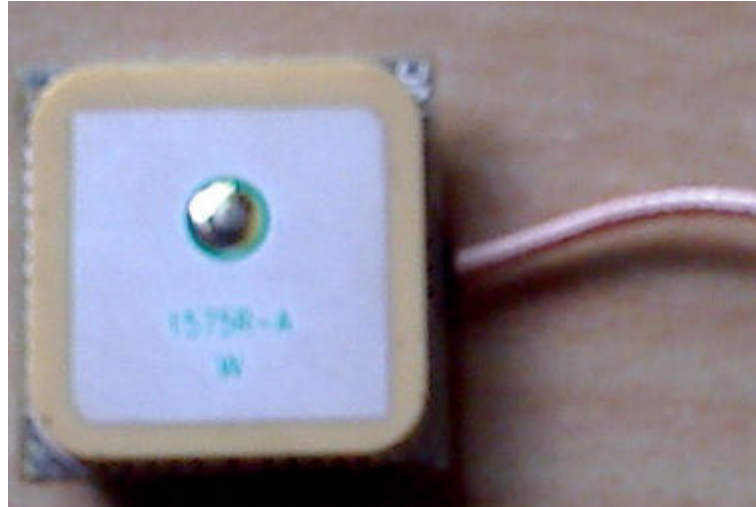
GPS Interface – GPS_Eval_EA

This board provides a GPS interface for the Ln_Eval boards. The module used in this board is either LEA-4S GPS receiver from u-blox or modulestek. This is a high sensitivity GPS receiver. This interconnected to the Lin_Eval board via a serial port. The voltage levels on the GPS board and the Lin_Eval_v2.0 board are at TTL levels (3.3 volt). These are interconnected in a Cross Cable type (I.e Tx of GPS is connected to Rx of Linseed and Rx of GPS is connected to Tx of Linseed). This GPS module needs to be powered up by an external 5 volt power supply.



➤ ***GPS Antenna***

The GPS receiver needs an antenna to obtain the GPS data. This antenna needs to be connected to the antenna connector available on the GPS interface board. There are two types of antenna that can be used here. One is a External antenna which is connected to the board via SMA connector and the other is Internal antenna which is directly connected onto the antenna connector position on the PCB. At any time, please note that the GPS antenna (internal or external) must always see the open sky for the signals to be received. The figure of Internal and External antenna is as shown below. The white antenna is the Internal antenna and the Black antenna is the External antenna.



GSM Interface

The features of GSM and GPRS can be got by interfacing the GSM board to one of the serial ports of the Linseed board. The connection between this two boards must be of Straight cable type (I.e Tx of GSM board to Tx of Linseed board and Rx of GSM board to Rx of Linseed board). The voltage levels of Tx and Rx on both the boards are at

TTL levels (3.3 volts level). This GSM board has a SIM connector inside which a SIM needs to be put if GSM feature needs to be used. If GPRS feature also needs to be used, then the SIM must have GPRS activated in it.

The GSM/GPRS module used on this board is Q24 plus from Wavecom which supports Dual band and is controllable from the 60 pin connector that is available on it.



➤ *GSM Antenna*

The GSM board needs an antenna for the module to get onto the network after which the GSM and GPRS works. The antenna type here is an External antenna.



Other accessories supported by the Lin_Eval_ boards

The below mentioned are the other accessories that can be interfaced with the Linseed board. These accessories are not supplied to the customer from EI Labs India Pvt Ltd, but they can obtain it from any other source and integrate it with this product.

➤ *Modems*

Any Fast track modem from Wavecom can be interfaced with the Linseed board via the serial Port at RS232 level. Please see to it that the serial port connections (Tx and Rx) between the Linseed board and the Modem are in the correct way. Also see to it that the voltage levels on both sides must be at TTL levels (3.3 volts).

➤ *USB to WiFi*

USB to WiFi module can be plugged into the USB host port of the Linseed board and the Wireless connectivity feature can be made used. The USB to WiFi adaptor from Netgear having module number WG111v2 must only be used.