

ORG14XX Series Evaluation Kit Datasheet

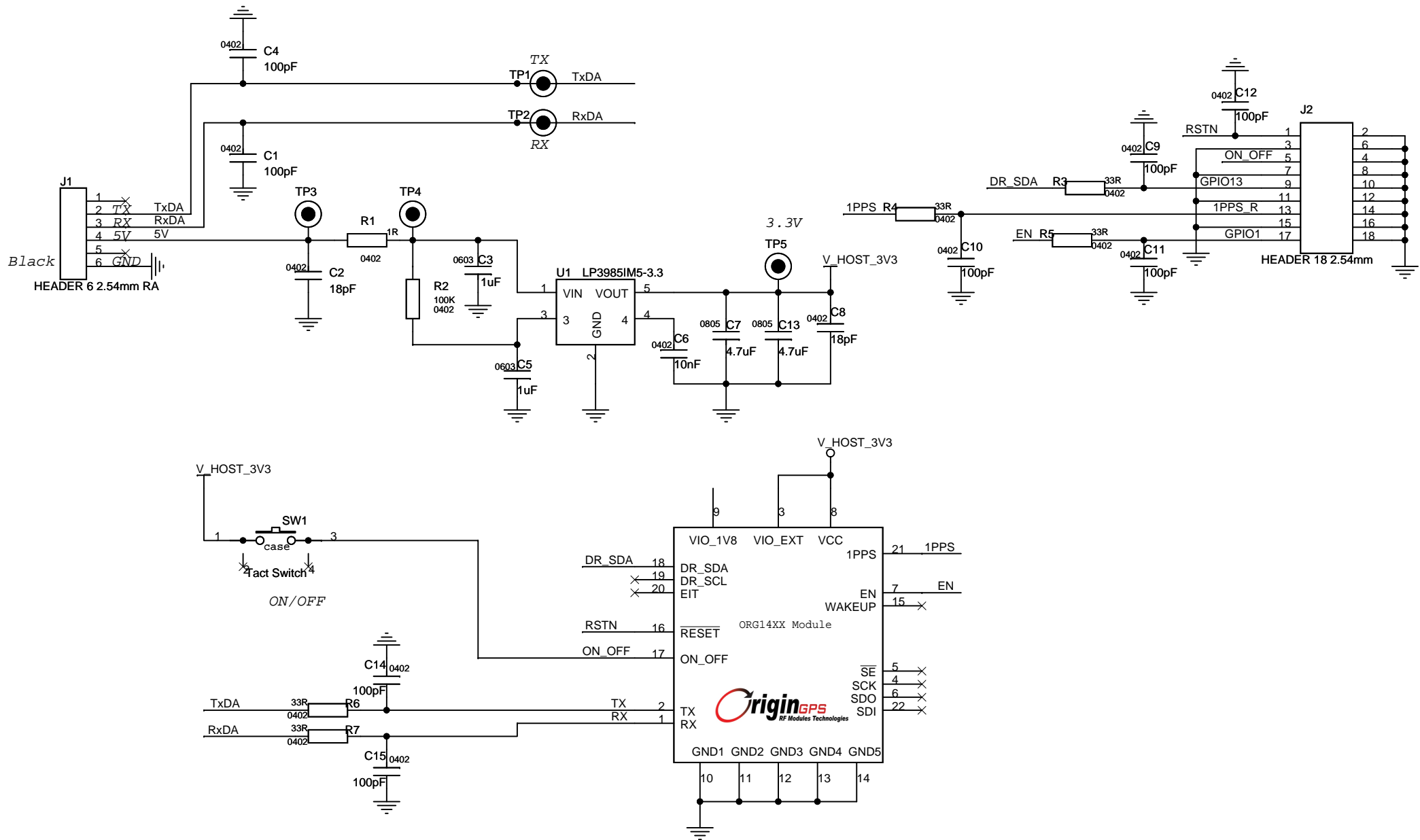


Description

Evaluation Kit of the ORG14XX Series GPS Antenna Module comprises the Demo Board, USB to UART cable and CD with GPS simulator software and documentation.

The Demo Board is built of Main Board, incorporating 3.3V LDO regulator, UART connector, push-button tactile switch for Push-To-Fix™ interrupt and various test points.

An ORG14XX GPS Antenna Module is soldered onto the Main Board.



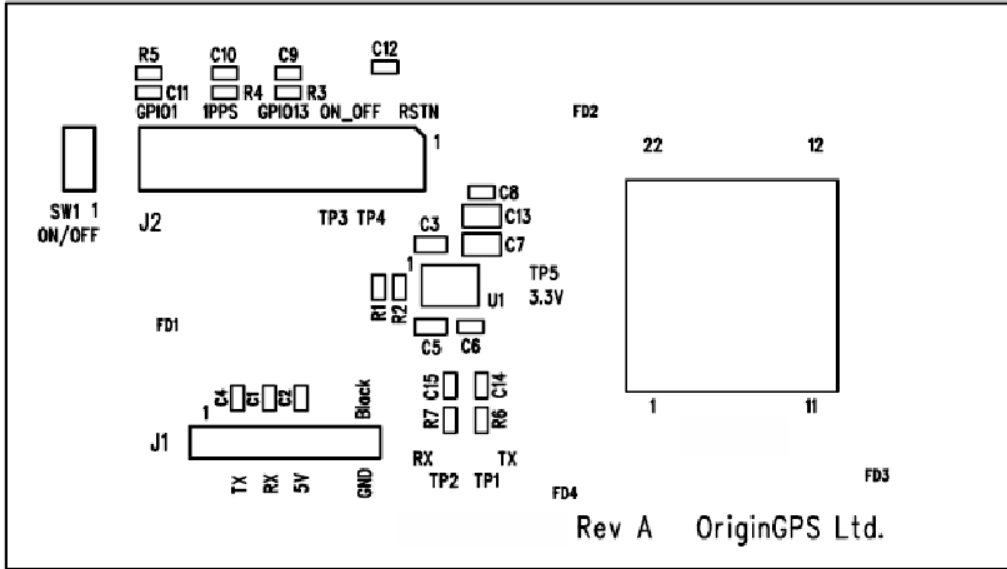
		Project	
		ORG14XX UART Evaluation Board	
Title			
ORG14XX UART Demo Board			
Size	Document Number	Authored By:	Rev
A4	ORG1400-DBUA	I. Divinsky	A00
Date:	Thursday, January 13, 2011	Sheet	1 of 1

2. Main Board Assembly Bill Of Materials

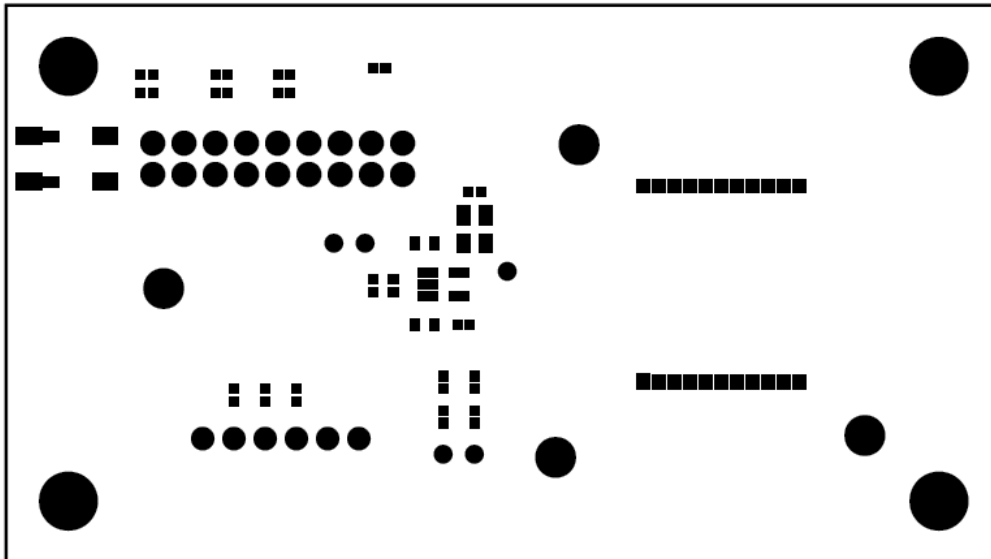
Item	Quantity	Reference	Value	Description	P/N	MFG
1	8	C1,C4,C9,C10,C11,C12,C14,C15	100pF	CAP SMT 100pF 50V 5% COG 0402	GRM1555C1H101JA01D	MURATA
2	2	C2,C8	18pF	CAP SMT 18pF 50V 5% COG 0402	GRM1555C1H180JZ01D	MURATA
3	1	C3,C5	1uF	CAP SMT 1uF 6.3V 10% X5R 0603	GRM188R60J105KA01D	MURATA
4	1	C6	10nF	CAP SMT 10nF 25V 10% X7R 0402	GRM155R71E103KA01D	MURATA
5	2	C7,C13	4.7uF	CAP SMT 4.7uF 6.3V 10% X5R 0805	GRM21BR61C475KA88B	MURATA
6	1	J1	HEADER 6 2.54mm RA	CONN. 6P TH RA	2211S-06G-F1	NELTRON
7	1	R1	1R	RESISTOR CHIP METAL FILM 0402 0.063W	CRCW04021RFRT1	VISHAY
8	1	R2	100K	RESISTOR CHIP METAL FILM 0402 0.063W	CRCW0402100KFRT1	VISHAY
9	5	R3,R4,R5,R6,R7	33R	RESISTOR CHIP METAL FILM 0402 0.063W	CRCW040233RFRT1	VISHAY
10	1	SW1	Tact Switch	SMD TACT SWITCH	TJ-532-V-T/R	DIPTRONICS
11	1	U1	LP3985IM5-3.3	3.3V LDO REGULATOR 200mA	LP3985IM5-3.3	NATIONAL

3. Main Board PCB layout

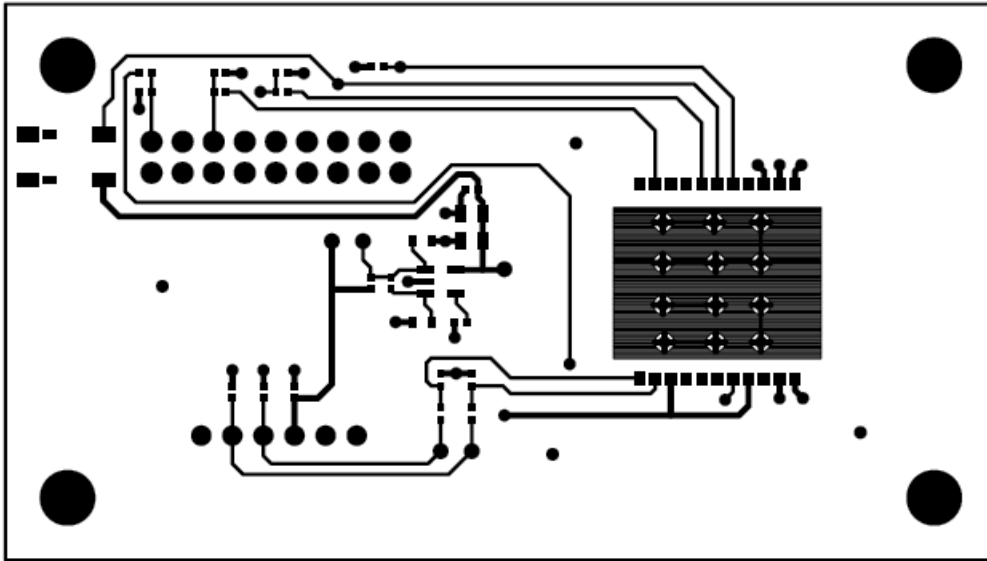
UART Main Board for ORG14XX Series GPS Antenna Module is 2 layers 1.6mm thickness FR4 PCB.



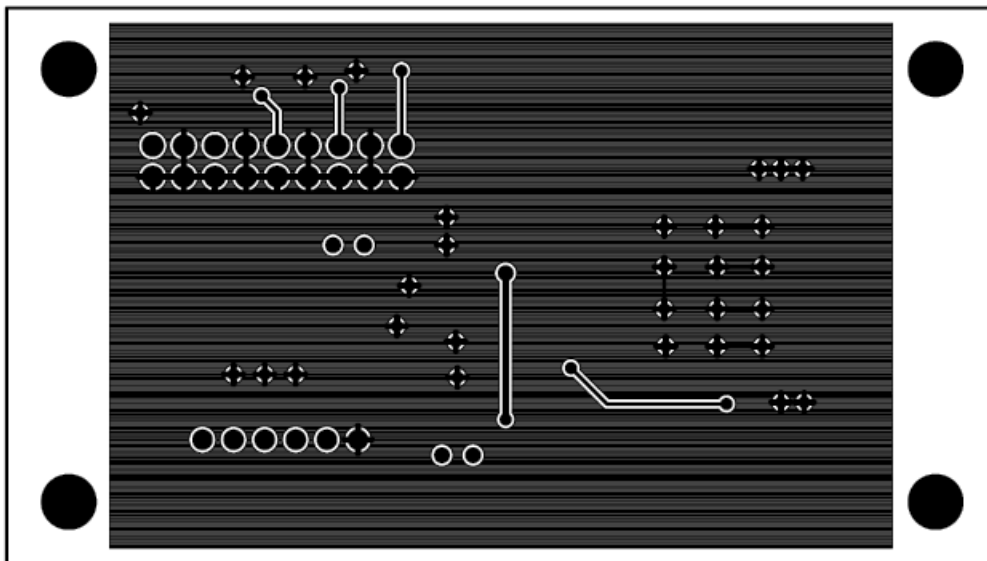
Components Placement



CS Solder Mask



Top Routing



Bottom Routing

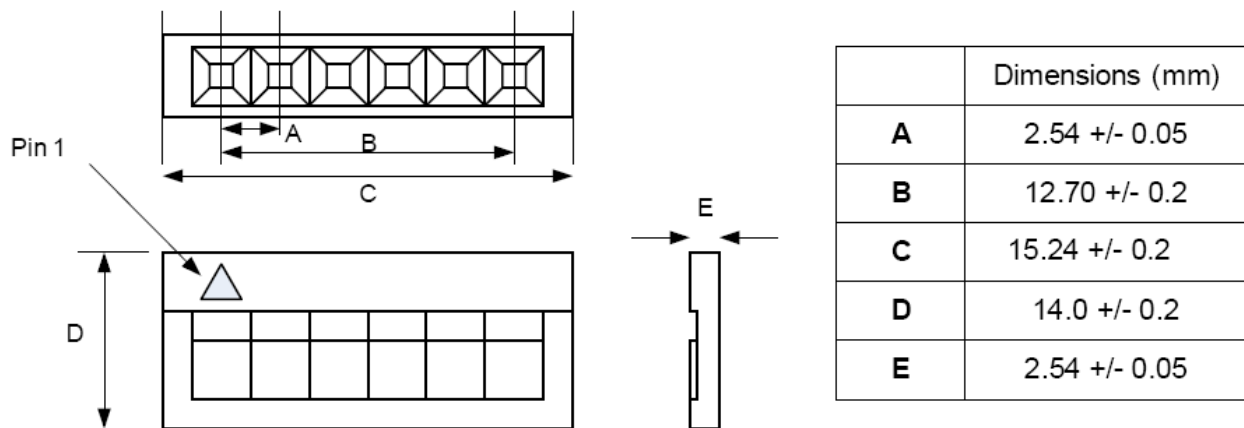
4. TTL-232R-3V3 USB-Serial Converter

The TTL-232R-3V3 is a USB to Serial (TTL level) converter cable which allows for a simple way to connect TTL interface devices to USB.

The TTL-232R-3V3 uses an FTDI FT232RQ IC which is housed inside the USB 'A' connector and is terminated at the end of a 1.8 meter cable (6 ft.) with a 0.1" pitch header socket which provided access to transmit (Tx), receive (Rx), RTS# and CTS#. These lines all operate at 3.3V levels.

Also brought out on the header are VCC (5V) and GND.

The mechanical details of the 6 way connector are shown in the following diagram



Header Pin Number	Name	Type	Colour	Description
1	GND	GND	Black	Device ground supply pin.
2	CTS#	Input	Brown	Clear to Send Control input / Handshake signal.
3	VCC	Output	Red	+5V output,

Header Pin Number	Name	Type	Colour	Description
4	TXD	Output	Orange	Transmit Asynchronous Data output.
5	RXD	Input	Yellow	Receive Asynchronous Data input.
6	RTS#	Output	Green	Request To Send Control Output / Handshake signal.