



Fox Delta

Amateur Radio Projects & Kits

FD- FM RADIO- 0317

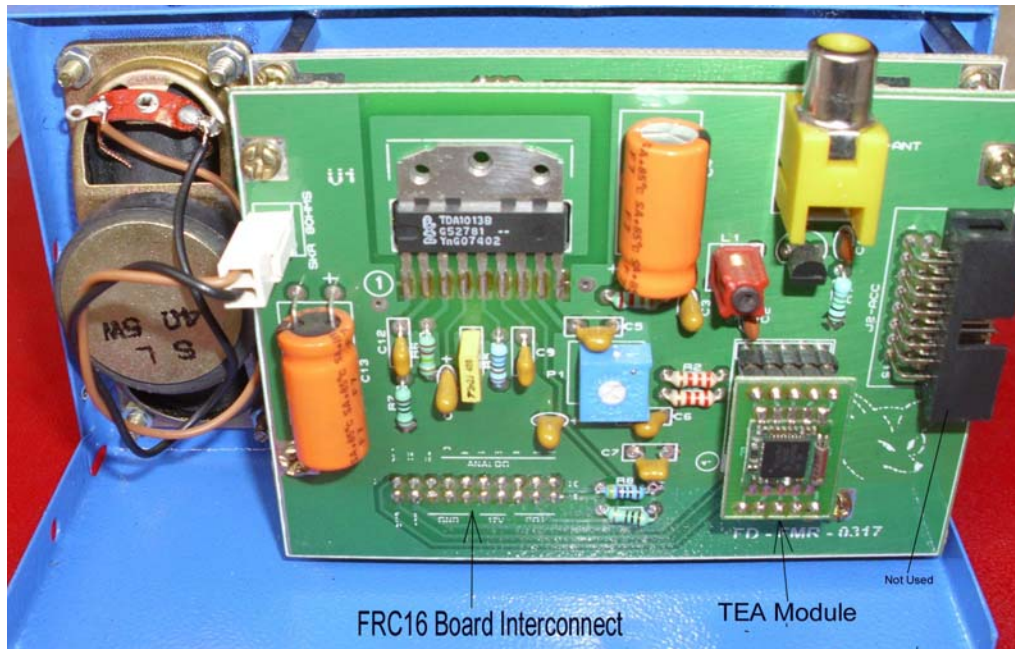
Schematic & Tech Info Doc: PIC18F25K22 BASED FM RADIO with TEA5767

Completed FM Radio Board: FD-FMR-0317



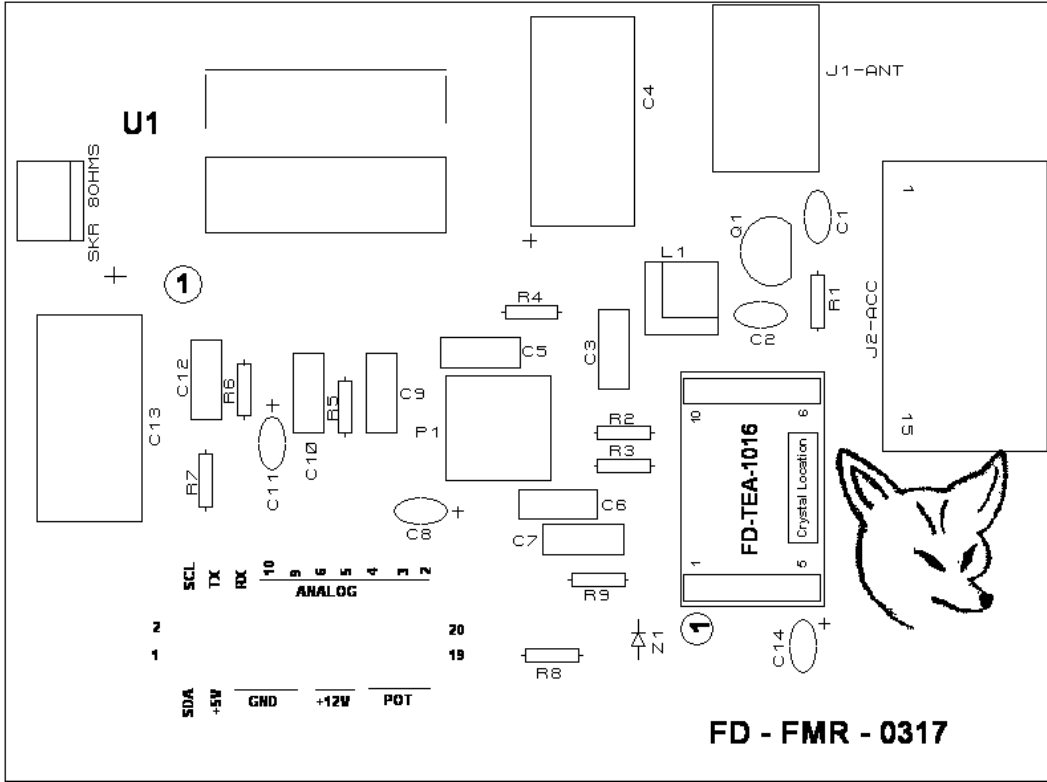
Tuning BT1 BT2 VOLUME

Inside FM RADIO:



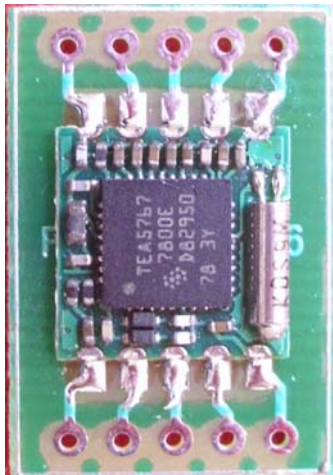
FRC16 Board Interconnect TEA Module Not Used

FD-FMR-0317: FM RADIO Add-on BOARD for GP-CPU-0317



Note: J2/FRC16 R/A Connector is not used in this project but Included in FM Radio Kits to fill up the metal case cutting.

TEA5767 MODULE is pre-soldered on FD-TEA-1016

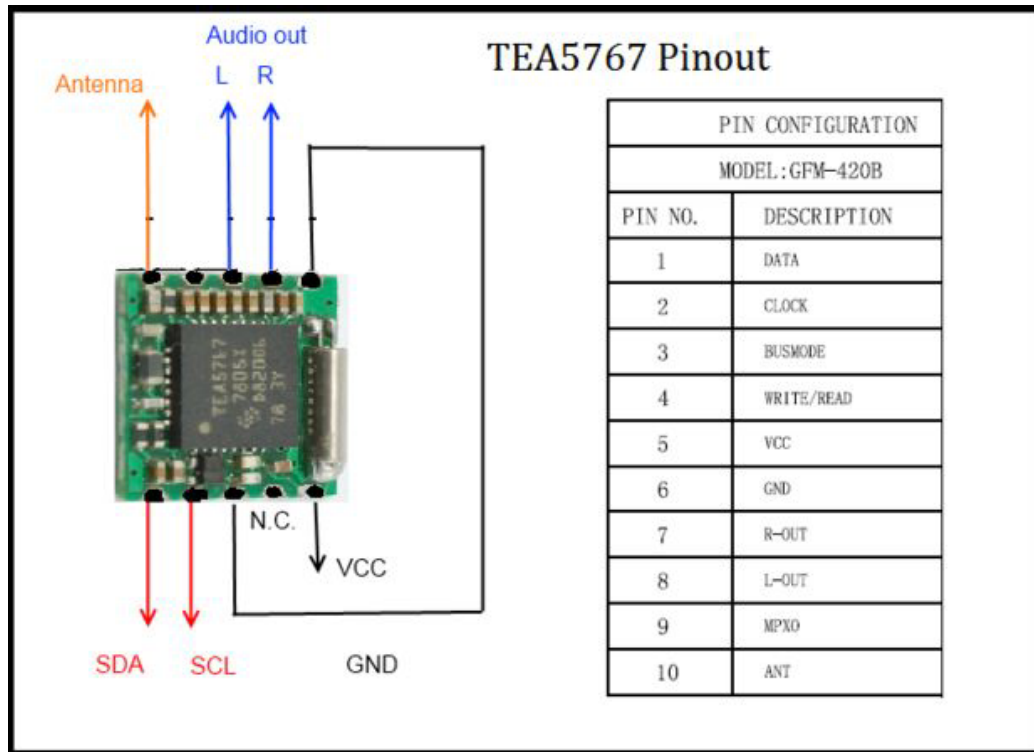


TEA5767 Module

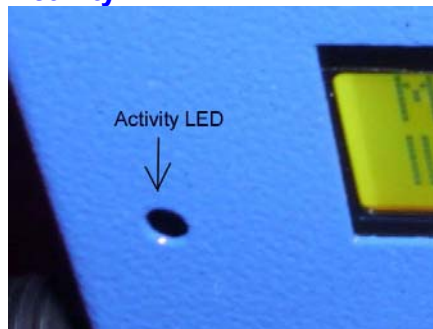


Location of Crystal

TEA5767 PINOUT: This SMT Module is pre-soldered on FD-TEA-1016 Carrier

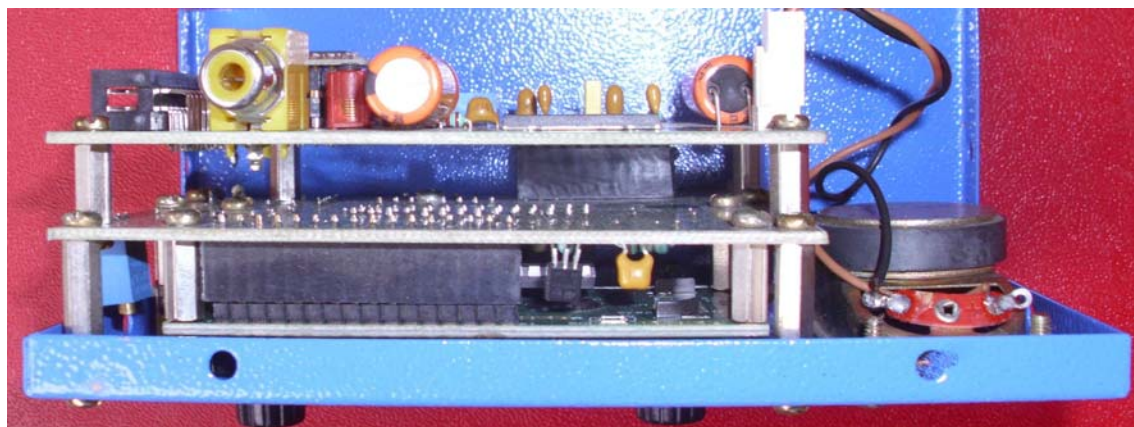


Activity LED:

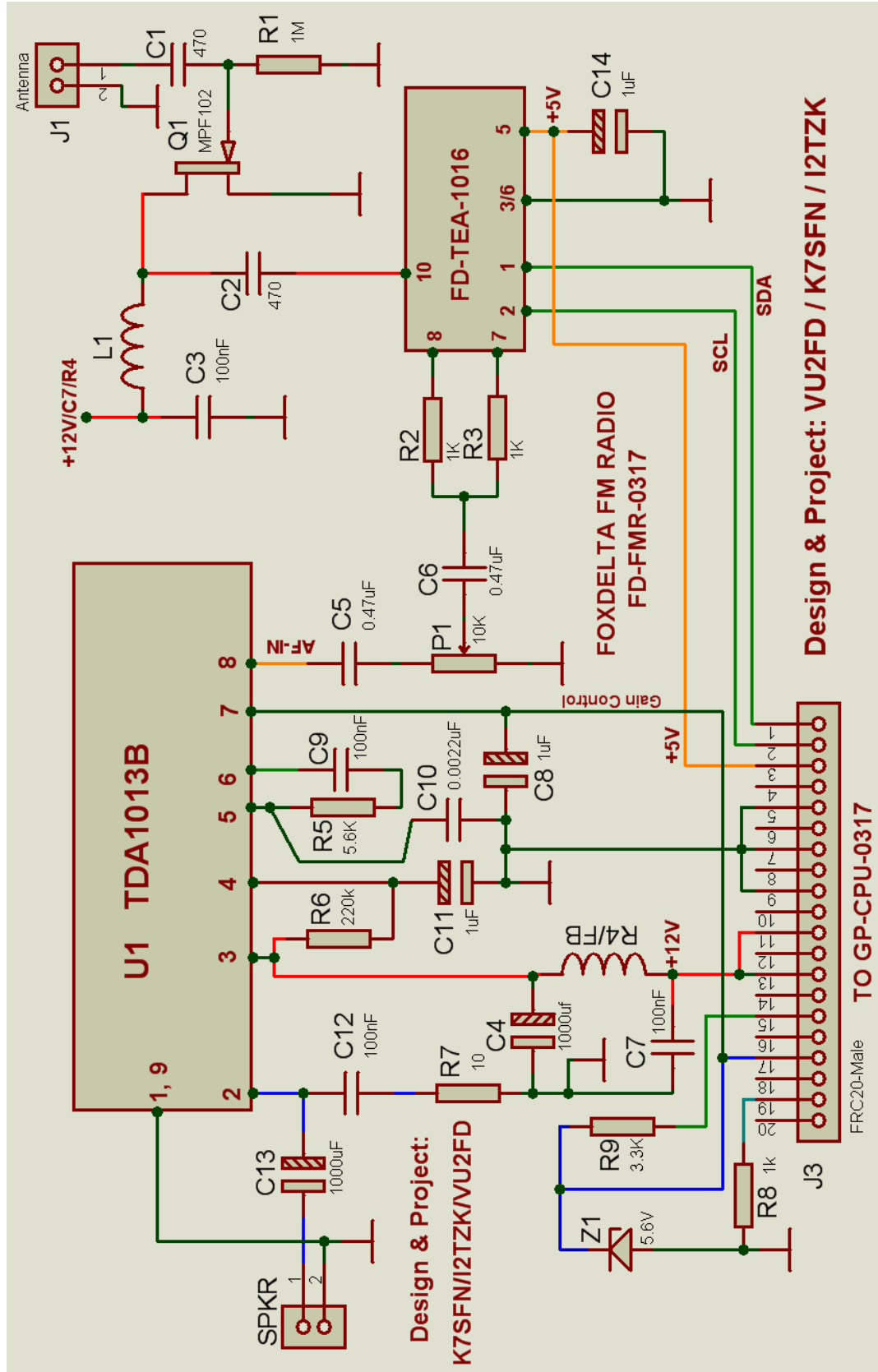


**Front Panel Activity LED indicates
"Save" to eeprom of PIC**

FM Radio TOP View: Bottom Board is CPU board. Top Board FM Radio Board



FM Radio Board Schematic:



FMR-0317 Parts List:

Quantity	Part ID	Part Details
1	TEA-1016**	FMRADIO TEA5767 Module Pre-Soldered
1	L1	5Turn Inductor with Core
1	Q1	MPF102 TO92
1	U1*	TDA1013B
1	J2***	FRC16 R/A PCB Connector.
1	J1	RCA Female Connector for Antenna
1	J3	FRC20 Male
1	Z1	Zener Diode 5.6V
1	P1	10K Preset Bourns 3386
1	Set	Hardware Nut/Bolts etc
1	Case	Free Powder Coated Metal Case
Capacitors:		
2	C13, C4	1000uF Electro
3	C14, 8, 11	1uF Tantalum
2	C5, C6	0.47uF Poly
4	C3, C9, C7, C12	0.1uF Poly
1	C10	0.0022uF Poly
2	C1, C2	470pf Ceramic
Resistors:		
1	R1	1M Ohms
1	R7	10 Ohms
1	R6	220K
1	R9	3.3K
3	R8, 2, 3	1K
1	R5	5.6K
1	R4/FB	2.2 Ohms or a Ferrite Bead Inductor

*U1 is a Standard Pin (Thru Hole) component but mounted as an SMT Part. It may or may not be supplied pre-soldered on PCB with kits.

** TEA5767 Module is Pre-Soldered and Supplied fully tested.

*** J2 is not used. It is included with kits only to fill up the metal case cutting window

Note:

FD-FMR-0317 board requires Digital/LCD Controller board GP-CPU-0317.
FM Radio kit include Both, FMR-0317 and GP-CPU-0317 boards.

For tech info on GP-CPU-0317 Board, Please refer to its tech info doc and schematic

73s / Dinesh Gajjar
1st July 2017

For more details, please visit Project Page: <http://www.foxdelta.com>