TC-EVAL

TC2, TC4 AND TC5 EVALUATION KIT





FEATURES & BENEFITS:

- Evaluation kit for the TC2, TC4 and TC5 Modules*
- O Interface cable included
- O Power supply included
- O USB Drive Included (Documents & Software)

INTERFACES:

- O Data & Control: Serial RS 232 or Ethernet**
- Radio Control: Serial RS 232 or Ethernet**
- O Baseband Audio: Bi-directional 600Ω
- O 6-36 VDC Supply: 2 W (typical)

INTERFACE OPTIONS (CONTACT RAPIDM):

- O Raw Data Port: Serial RS 232
- O Digital Audio: McBSP

SUPPORT FOR TC MODULE FUNCTIONS:

- O Secure Digital Voice Vocoder, Encryption and Modem
- O Data Modems LF / HF / MF / VHF / UHF
- O ISB Capable MIL-STD-188-110B, App. F
- O **2G ALE –** MIL-STD-188-141C, App. A
- O 3G ALE STANAG 4538 FLSU
- O 3G Packet Data STANAG 4538 xDL
- O Wideband V/UHF RapidM proprietary
- O Wideband HF MIL-STD-188-110C, App. D
- O Wideband ALE (4G WALE) MIL-STD-188-141D

DESCRIPTION

The *TC-Eval* is an evaluation kit for the *RapidM TC2, TC4 and TC5* Modules. The *TC-Eval* allows equipment manufacturers to evaluate the module functions including LF / HF / VHF / UHF data modem and ALE controller capabilities.

AUDIO SUBSYSTEM

The audio subsystem provides filtering, impedance matching and amplification of the TC module's interfaces.

UART BUFFERS

UART buffers convert the TC module's UART interfaces to RS-232 levels.

POWER CONDITIONING

The 6-36 V input is filtered and conditioned, powering the TC module as well as the peripherals.

- * TC modules are not included
- * Ethernet not available on TC4 (TC2 and TC5 only)



PRIMARY INTERFACES					
MODULE CONNECTOR	100-way fine pitch (TC4 compatible) An adaptor board is provided to connect a TC2 or TC5 module (also provides RJ45 Ethernet connector).				
BREAK-OUT CABLE ENDPOINTS	UART A	Mechanical: Electrical: Rate: Data Format: Hardware Flow Control: Typical Use: Alternate Use:	DE9F D-sub 9 pin female RS-232 75 to 230400 bps 1 or 2 stop bits, 7/8 bit data CTS/RTS Available Data & Control (RAP1/RIPC Protocol, 115200 bps, 8N1, No flow control) Raw Data Port (Build option)		
	UART B	Mechanical: Electrical: Rate: Data Format: Hardware Flow Control: Typical Use: Alternate Use:	DE9F D-sub 9 pin female RS-232 75 to 230400 bps 1 or 2 stop bits, 7/8 bit data None Radio Control (Transceiver protocol) Control (RAP1/RIPC Protocol, 115200 bps, 8N1)		
	Audio 1	Mechanical: Electrical: Typical Use:	3x Banana plugs (Tx, Rx, Common) 3 Vpp, 600 Ω (Output is 6 Vpp when not loaded) SSB/USB Baseband audio to/from radio		
	Audio 2	Mechanical: Electrical: Typical Use:	3x Banana plugs (Tx, Rx, Common) 3 Vpp, 600 Ω (Output is 6 Vpp when not loaded) LSB Baseband audio to/from radio		
	PTT Output (Keyline)	Mechanical: Electrical: Typical Use:	1x Banana plug (paired with PTT Ground) Open Collector (<36 V, 200 mA) Key radio on modem transmit		
	PTT Input	Mechanical: Electrical: Typical Use:	1x Banana plug (paired with PTT Ground) Pull to ground (Active low) Detect operator PTT		
	PTT Ground	Mechanical: Electrical: Typical Use:	1x Banana plug Ground Ground for PTT Output & PTT Input		

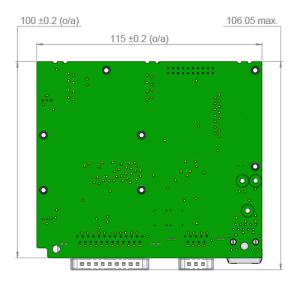
HARDWARE				
SIZE	115 x 106 x 14 mm (w x d x h)			
SUPPLY INPUT (BOARD)	Voltage: 6-36 VDC Power: 2.0 W (typ)			
SUPPLY INPUT (PSU)	Voltage: 100-230 VAC			

ENVIRONMENTAL

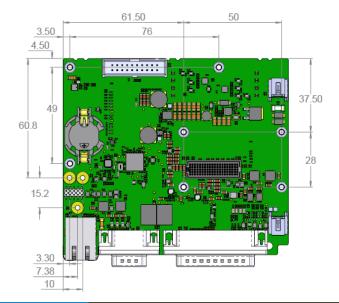
TEMPERATURE	-30°C to +70°C (operating); -30°C to +77°C (storage)

MANUFACTURING

STANDARDS IPC-A-610 Class 3, J-STD-001 Class 3







Ordering Information	STOCK NUMBER	DESCRIPTION
Evaluation Kit for TC2 and TC5	TC2-EV-0011-SPC	Bundle: TC2 Eval Kit (TC2 excl.)
Optional Break-Out Board for TC2/TC5	TC2-AC-BRKB-000	Accessory: TC2 Breakout Board
Evaluation Kit for TC4 and TC4-LP	TC4-EV-0000-SPC	Bundle: TC4-Eval2 Kit (TC4 excl.)
Optional Break-Out Board for TC4/TC4-LP	TC4-AC-BRKB-000	Accessory: TC4 Breakout Board



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