

MODULAR ONE TECHNOLOGY

Application BRIEF:

MOT702_OEM TEC controller Board

- Supports two TEC Controller modules
- Two times ±2A, ±2.5A & ±3A Maximum TEC Currents.
- Temperature Stability Better than 0.002°C
- Connections for external monitoring and control signals
- User customizable, on-board or via external connections
- Single Supply Operation (3 5V)
- RoHs Compliant

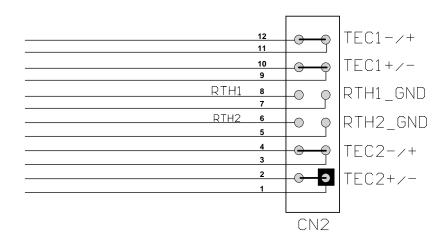


Description

The MOT702_OEM board is designed for systems requiring higher density or redundancies. This OEM board accommodates two TEC controller modules which could be used either independently or together. It allows customers to integrate this board into their system. It has all the components required for the controllers to fully function. Connection points are provided on the edges of the board to directly wire connections to the power supply, TEC cooling elements, and temperature monitoring devices. A further series of connections are provided for external monitoring and control signals.

Each controller drives and controls its own TEC module.

Please refer to the MOT7000, MOT3000 & MOT7001 datasheet for the electrical capabilities of the modules.



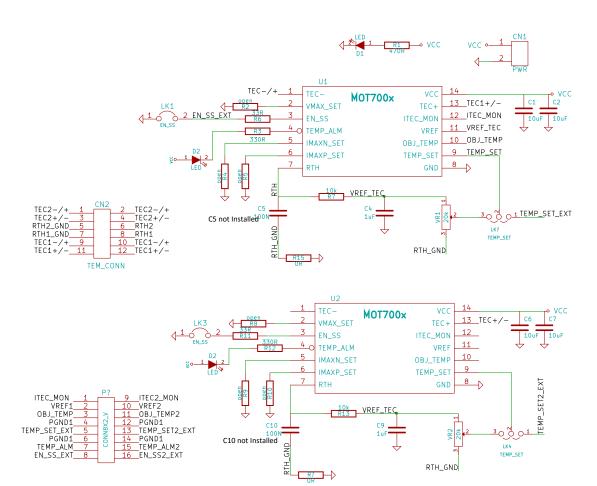
Ribbon Cable and CN2 Connector wiring diagram



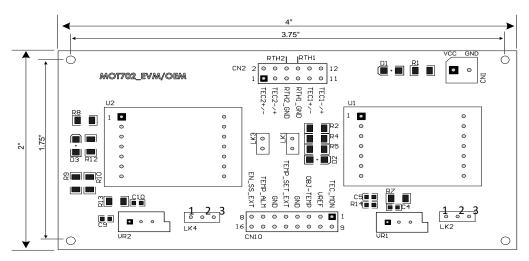
Application BRIEF:

MOT702_OEM TEC controller Board

MOT702_OEM Schematic:



Board Dimensions & Components identifications:



Notes:

- 1. Refer to the schematic for CN2 & CN10 pin descriptions.
- 2. CN10 pins 1 to 8 correspond to U1 (TEC controller 1)
- 3. CN10 pins 9 to 16 correspond to U2 (TEC controller 2)
- 4. LK1 is Enable/Disable link for TEC1 (no link is enabled).
- 5. LK3 is Enable/Disable link for TEC2 (no link is enabled)

Selection Table:

Part #	Descriptions
MOT702_20TEC	Dual ±2A TEC controller OEM Board, uses MOT7001-20
MOT702_25TEC	Dual ±2.5A TEC controller OEM Board, uses MOT3000-25
MOT702_30TEC	Dual ±3A TEC controller OEM Board, uses MOT7001-30

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