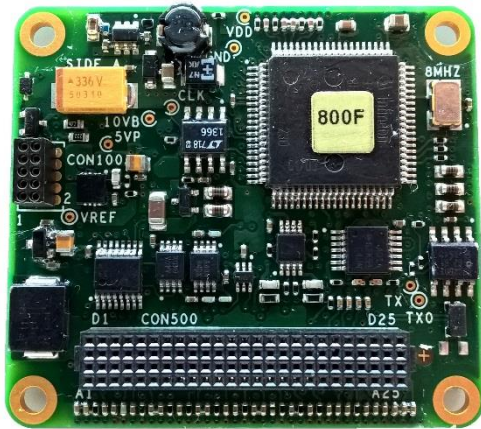


PRODUCT SUMMARY

STEERING WHEEL INTERFACE UNIT

SIU-320



The SIU-320 Steering Wheel Interface Unit is a local sensor and switch interface unit designed to become an integral part of an assembly such as a racing car steering wheel. All sensor/switch data is linked by CAN to a main control unit which reduces the harnessing while expanding the analogue and digital input capabilities of the system.

ELECTRICAL

- Supply Voltage 11.5V to 16.0V DC (full operation) 7.0V to 11.4V (full operation except external 10V strain gauge supply)
- Supply Voltage not to exceed 17V continuous (unit is protected against transients and reverse polarity)
- Supply Current operating 90mA typical @ 13.8V including typical transducer loads (user defined LEDs off)

ELECTRO MAGNETIC COMPATIBILITY

- Complies with the essential protection requirements of 2004/108/EC

MECHANICAL

- Weight less than 25g (as a subassembly)
- Board dimensions 50mm x 45mm x 10.2mm

CONNECTION DEFINITION

- Samtec Quad row FOLC female connector (4x25pin) Part no. FOLC-125-04-S-Q-LC
- Mating connector part no. MOLC-125-01-S-Q-LC

DIAGNOSTICS

- 1 internal diagnostic temperature sensor
- 1 internal diagnostic 5V output supply
- 1 internal diagnostic vehicle supply voltage

APPLICATION

- Interface to remote sensors and switches, e.g. controls on steering wheel

INPUTS

- 18 digital switch inputs
- 11 0 to 5V analogue inputs (10bit resolution)
- User selectable analogue input: Amplified strain gauge input/ 0V to 5V analogue input
- 1 reset input
- 2 external switch inputs (not internally sampled) with an internal connection to the external switch output

OUTPUTS

- 1 10V output supply for strain gauge transducer
- 1 5V supply for potentiometers and transducers
- 3 user defined high side LED drivers
- 1 external switch output

COMMUNICATIONS

- 1 CAN bus interface, 1Mbps

ENVIRONMENTAL

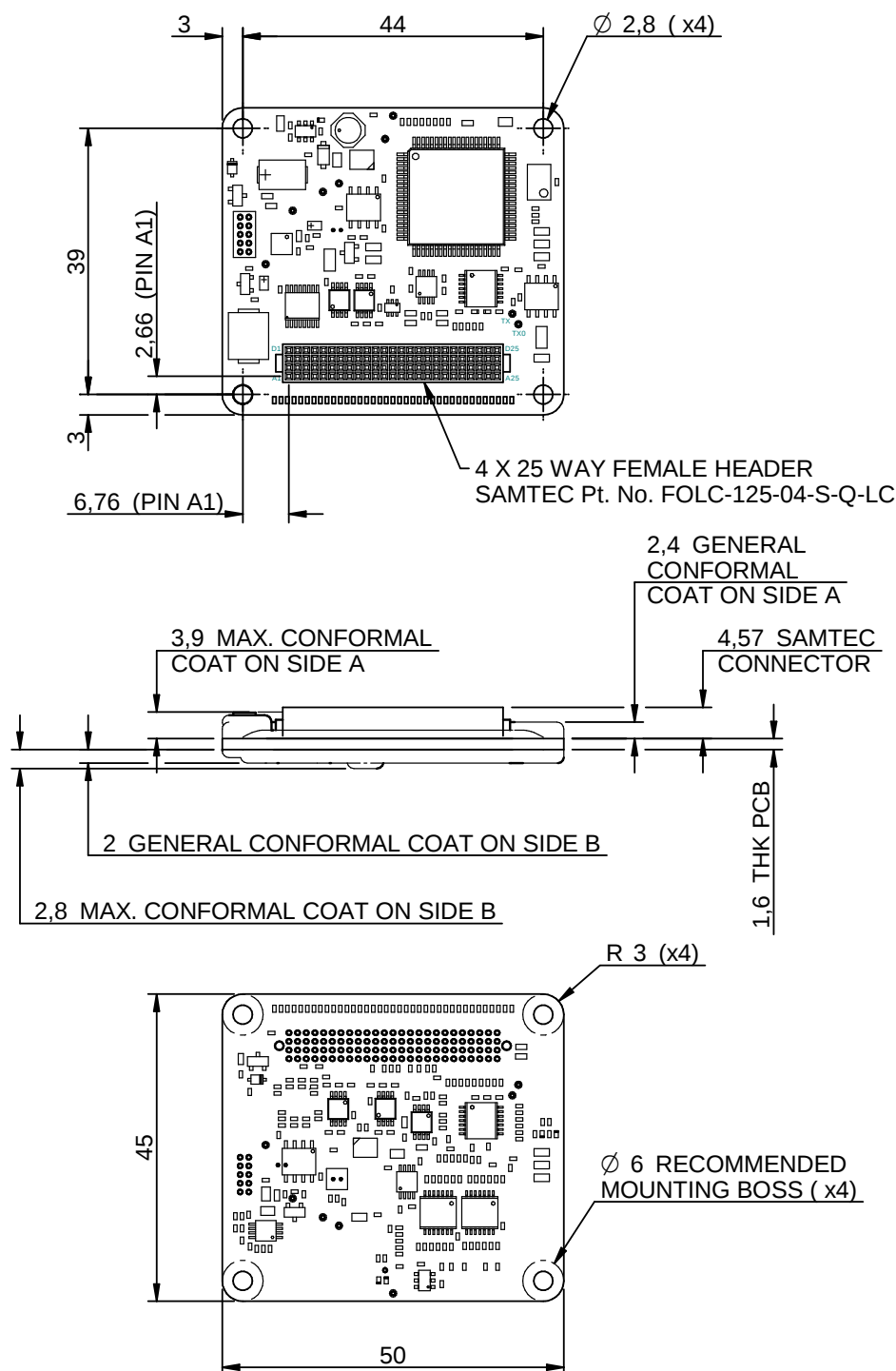
- Minimum Operating Temperature 0°C
- Board Temperature not to exceed 70°C
- Storage temperature -10 to +85°C
- Vibration 100 to 1000Hz, all axes

PRODUCT SUMMARY

STEERING WHEEL INTERFACE UNIT

SIU-320

DRAWINGS



Order Code	Model Description
O 030 110 006 009	SIU-320

For any queries, please contact McLaren Applied Technologies at sales@mclaren.com