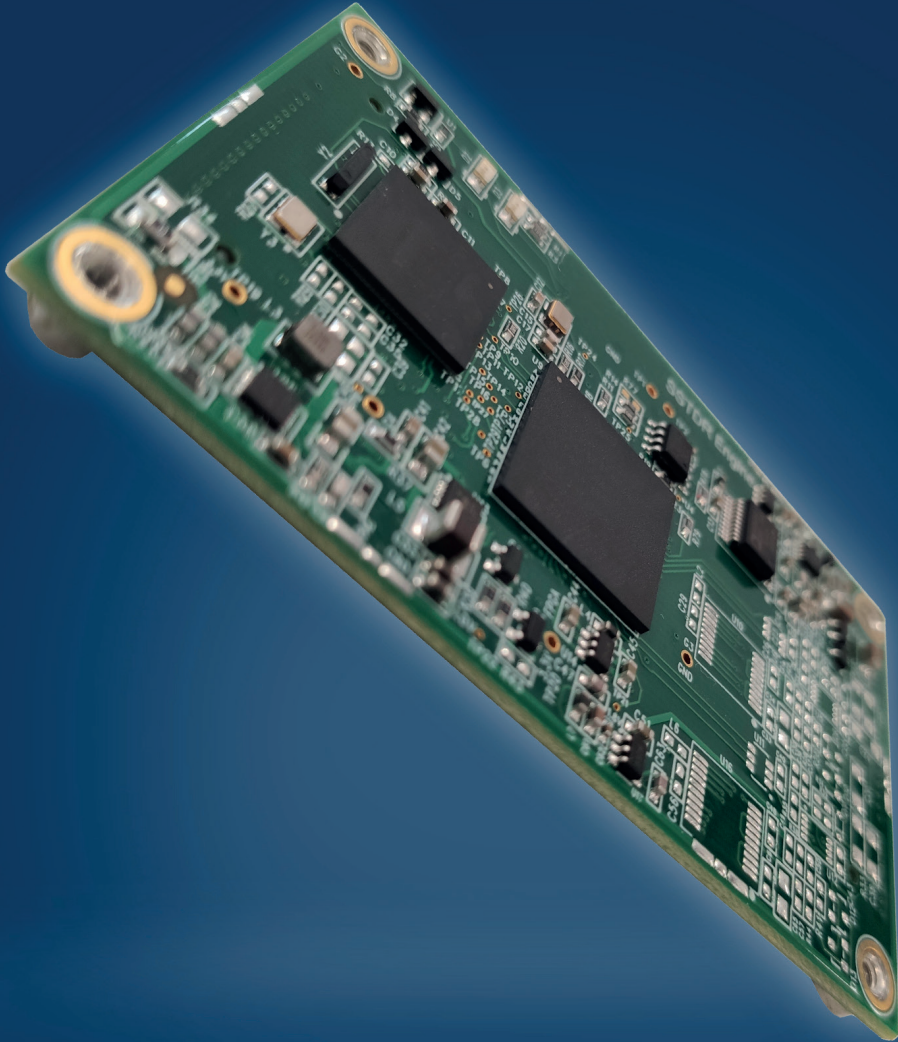


V | SSTDR S100



Technical Data Sheet

Board-level fault
detection engine

• INTELLIGENCE INSTALLED

Live detection and location of faults in electrical cables and wires

V | SSTDR S100

The SSTDR S100 is a fully engineered, board-level fault detection engine.

The fully engineered, credit-card-sized SSTDR S100 Module and associated chipset enable engineers, original equipment manufacturers, end-equipment manufacturers and system operators to develop and integrate live cable monitoring capability into host equipment. When integrated with a suitable support board and front-end coupling, the module can monitor live cables, wires and electrical systems to detect and locate critical open circuits, short circuits, arc faults, impedance changes and hard-to-detect intermittent events. It also supports the collection of baseline data, helping users identify developing issues and support the prediction and prevention of outages.

Applications

- General industry applicability in utilities, aerospace, rail systems, PV array, telecoms, industrial and power systems
- Live cable monitoring
- Live cable power theft/damage detection
- Cable harness testing

Features

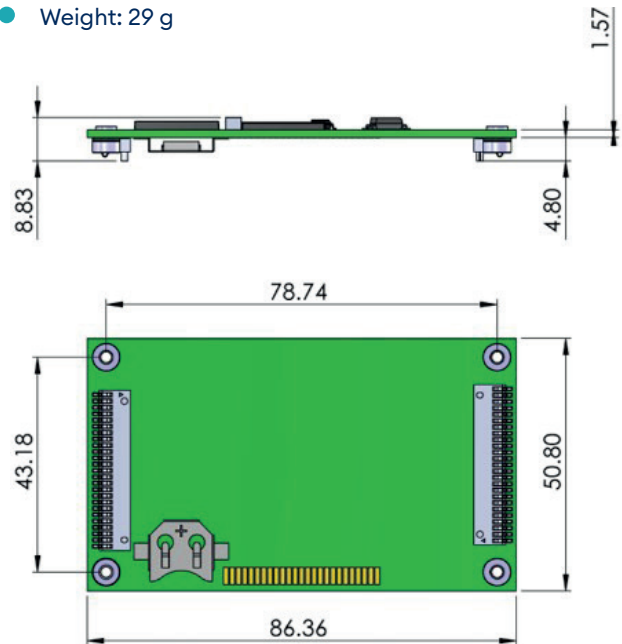
- Continuous monitoring of live electrical systems when integrated with a suitable support board
- Detects short circuits, open circuits, circuit impedance changes
- Detects intermittent and persistent faults
- Distance to fault accuracy up to 98%
- Covers wide range of cable lengths, from cms to kms
- Multiple SSTDR S100 modules can be used on the same conductors without interference
- Small, credit-card sized form factor

Product Marks



Mechanical

- Dimensions: 86.36 mm x 50.8 mm
- Weight: 29 g



All dimensions in mm.

Mounting

- 4 Screws - 4-40 thread x 1/4"

Measurements

- Single channel
- Maximum Output Voltage: 3.3 V
- Default Output Voltage: 1.27 V
- Output Voltage Resolution: 33 mV
- Test Frequencies: 93.75 kHz to 24 MHz
- Distance Range (cable dependent):
 - Electrical cable: 0 to 5 km
 - Data cable: 0 to 1 km
 - Coaxial cable: 0 to 1 km
 - Shield power distribution cable: 0 to 6 km

Unit types: metres or feet

Test modes:

- **Static:** single measurement using all frequencies
- **Sweep:** continuous monitoring using 4 pre-programmed frequencies
- **Dynamic:** continuous monitoring using a single frequency
- Results can include; fault notification, fault type, fault distance, fault duration, waveforms

Communications Interface

- Serial Interface UART
- Reset

Support Board Requirements

- S100 module requires support board
- Front-end coupling determines maximum operating voltage

Operating Characteristics

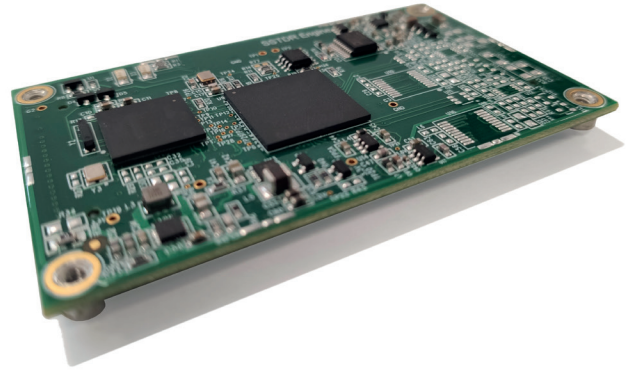
- Input voltage: 2.7 to 12 Vdc
- Typical Power Consumption: 1.2 W

Environmental

- Operating / Storage Temperature: -40° C to + 85° C

Order Code

- VA-229154 SSTDR S100 Module



Evaluation Units

- VA-227852/EVAL SSTDR S100, RS485, 750 V, DIN*
- VA-232139/EVAL SSTDR S100, UART, 750 V, DIN*



Image is for illustrative purposes only.

*Supplied for engineering development and evaluation purposes only. Evaluation units are intended for professional use under controlled conditions and are not supplied as finished products for permanent installation, resale or operational service.



Get in touch with one of our experts today and learn what SSTDR S100 can do for you.



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