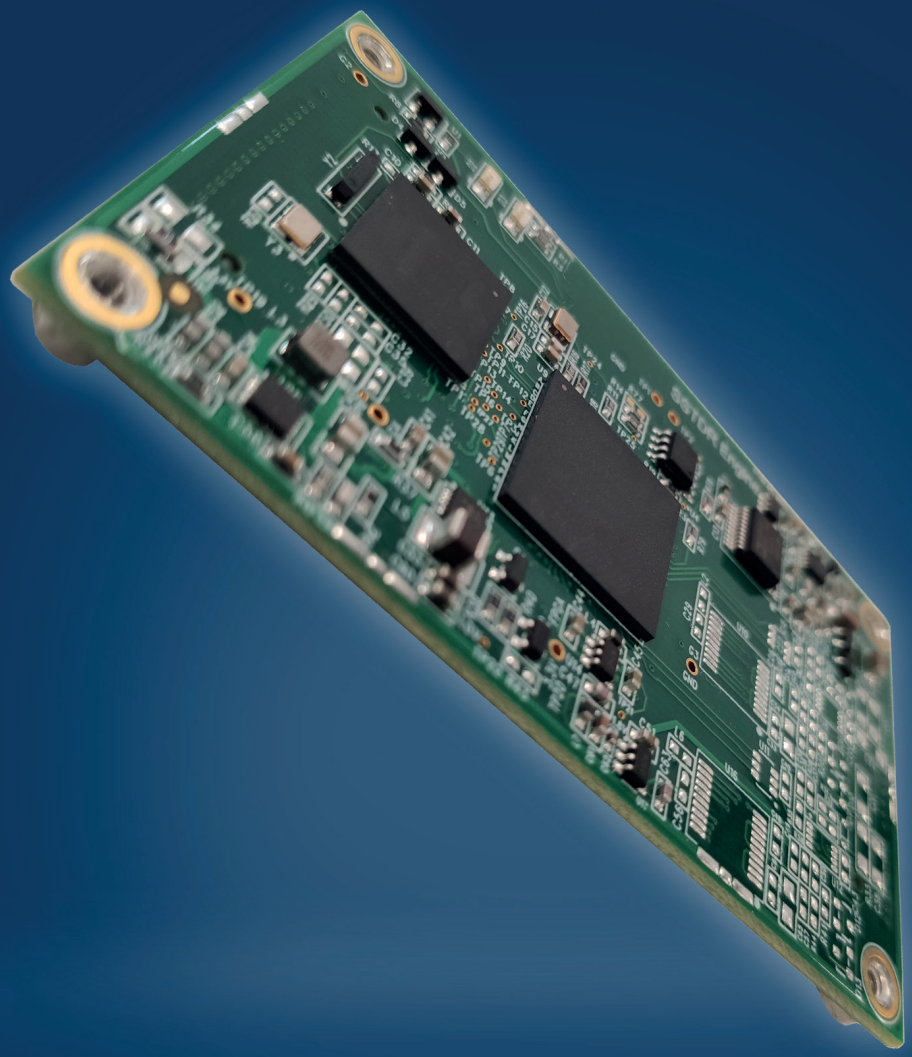
SSTDR S100



Technical Data Sheet

Board-level fault detection engine

INTELLIGENCE INSTALLED

Live detection and location of faults in electrical cables and wires

SSTDR S100

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

The fully engineered, credit card-sized board and corresponding chipset enables engineers, OEMs, end-equipment manufacturers, as well as system operators to quickly develop and integrate the ability to monitor live cables, wires and electrical systems for the detection and location of critical open and short circuits, arc faults, and hard to see intermittent events. Importantly, it can operate on live systems. The system can operate on live electrical networks and supports the collection of baseline data to enable prediction and prevention of outages.

Applications

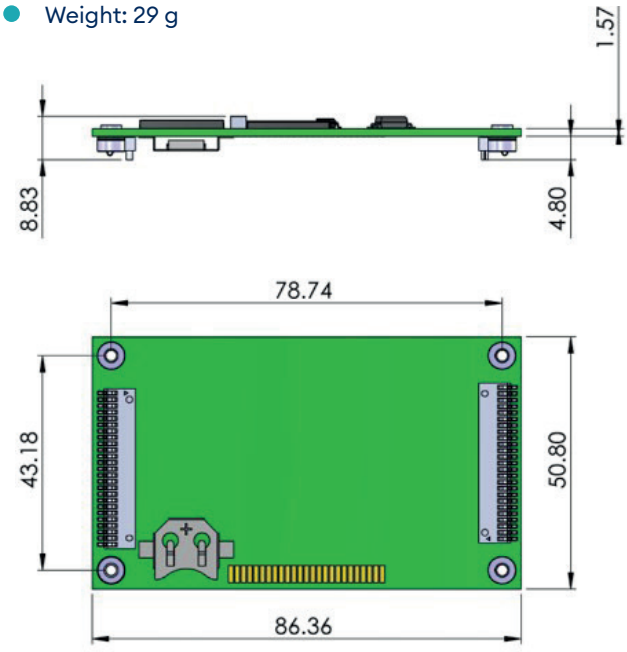
- General industry applicability in utilities, aero-space, rail systems, PV array, telecoms, industrial and power systems
- Live cable monitoring
- Live cable power theft/damage detection
- Cable harness testing

Features

- Continuous monitoring of live electrical systems
- 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
- Fully engineered, ready to integrate board-level fault detection engine

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”

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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

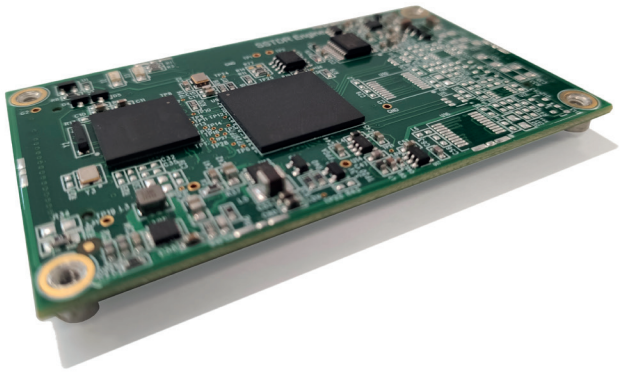
- Input voltage: 2.7 to 12 Vdc
- Typical Power Consumption: 1.2 W

Environmental

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

Order Code

- VA-229154 SSTDR S100 Module



Product Variants

- 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 only.

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Get in touch with one of our experts today and learn what SSTDRS100 can do for you.

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