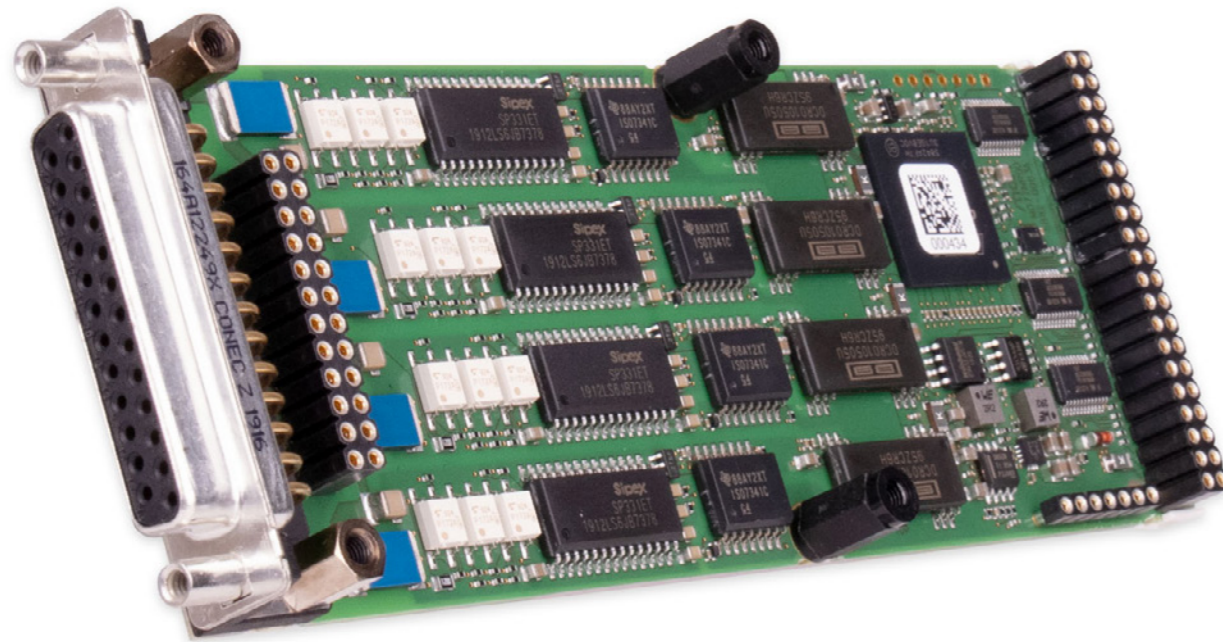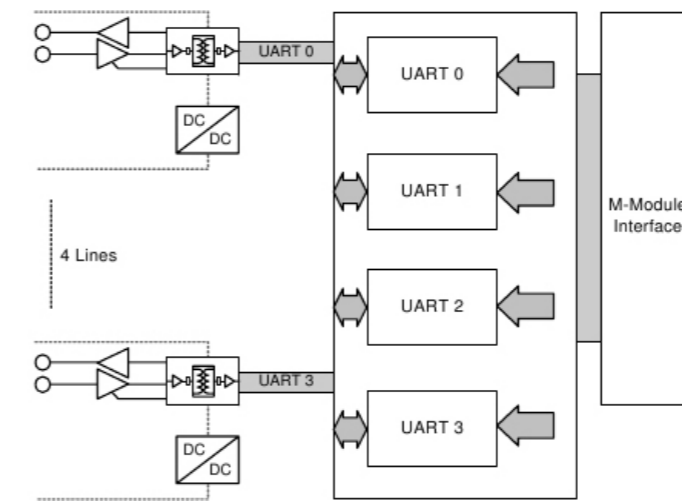# M77N – Quad RS232/RS422/RS485 UART

Block Diagram

Features

- 4 individual configurable UART channels
- Supported Operation Modes
  - RS422 half-duplex
  - RS422 full-duplex
  - RS485 half-duplex
  - RS485 full-duplex
  - RS232
- 128-byte FIFO for each transmitter and receiver
- All 4 channels with 4 lines (no handshake lines)
- All 4 channels electrically isolated from the system and from each other

Use Cases

- Emulating sensors with serial interfaces to ECUs
- Developing application specific serial protocols
- Controlling actuators

Technical Data

4 UART controllers	• Four independent full-duplex asynchronous high-performance UART channels • Four isolated groups, optical isolation • Software-configurable as RS232/RS422/RS485 • 128-byte FIFO for each transmitter and receiver • UARTs fully software compatible with industry standard 16C55x type UARTs • Data rates up to 2 Mbit/s • Automated in-band flow control using programmable Xon/Xoff characters, in both directions • 5-, 6-, 7-, 8- and 9-bits data framing • Independent channel reset by software • Transmitter and receiver can be disabled
Galvanic isolation	Optically isolated from the system and from each other
Connector	25-pin D-Sub connector (female)

Order Information

Order Number	IO-M77