

# MSP2000NET

Multi Standard Programmer  
High Performance Modular Production In-Line Programming System  
for Parallel Programming



MSP2000NET Desktop Version



MSP2000NET 19" 1/2 Rack Version



MSP2000NET 19" Rack Version

## MSP2000NET Technical Data

- Multi Standard Programmer with configurable I/Os supporting multiple interfaces (BDM, JTAG, SPI, SCI, I2C,...) with individual ground return lines for each signal
- Fast Ethernet interface 10/100 M-Bit/s (auto-sensing speed and full/half duplex mode, auto cross-over capability)
- I/O voltage of interface signals adjustable from 3.0 to 5.0 V
- Target voltage (U\_Module) adjustable from 2.8 to 5.5 V, max. 500 mA
- Programming high voltage output, max. 12.7 V / 200 mA
- Analogue input voltage range 0 to 5,5 V
- Digital input voltage range 2.8 to 5.5 V
- Separation of the I/O signals with CMOS switches or optionally with relays
- Two targets can be connected simultaneously
- Dedicated connector for FlexRay, CAN, and LIN interfaces
- Power consumption max. 10 W, typ. 5.5 W (without target)
- Desktop enclosure dimensions 165 x 40 x 145 mm
- Pluggable in a 19" Rack (front panel dimensions 3 U / 7 HP, see the description of the rack solution MSP2000NET-Rack)
- Provision to control or switch the external target voltage supply
- Modular concept allowing for various options (high speed interface, galvanic isolation, customer specific extensions)
- Power supply 15 V DC
- Temperature range 0..60°C
- Weight about 850 g



## MSP2000NET Desktop Options

- C1 – two target interfaces with analog isolation
- C2 – two target interfaces with galvanic isolation of the programming voltage and configurable I/O signals including the corresponding ground return lines
- C3 – two high speed target interfaces. Hardware – implemented protocols enabling high speed data communication (up to 120 MHz clock frequency) and programming targets in parallel

## MSP2000NET-Rack Technical Data

- Accommodates up to 10\* MSP2000NET modules in a standard 19" rack or 5\* MSP2000NET in 19" ½ rack
- Optional: In 19" rack integrated power supply, controlled and monitored to supply target application. Either installed in separate rack or together with MSP2000NET - \*can limit number of programmers installable in 19" rack. Please see our separate datasheet for further details.
- Integrated Ethernet switch and power supply for programmers
- Rear panel connections: 100-240 VAC and Ethernet RJ45 host interface
- Power converter modules with galvanic isolated outputs
- Rack enclosure standard dimensions 482 x 132 x 348 mm
- MSP2000NET modules with different hardware options can be plugged in the same sub-rack

## MSP2000NET Rack Options

- R1 – two target interfaces with analog isolation
- R2 – two target interfaces with galvanic isolation of the programming voltage and configurable I/O signals including the corresponding ground return lines
- R3 – two high speed target interfaces. Hardware – implemented protocols enabling high speed data communication (up to 120 MHz clock frequency) and programming targets in parallel

## Software solutions

- Please see our separate datasheets for our comprehensive software solutions:
- WinStarNET (for Desktop MSP2000NET)
- Winp\_onlineNET
- FlashTASK