

# SOCRATES Series

## SHDSL.M2.1CH/4CH

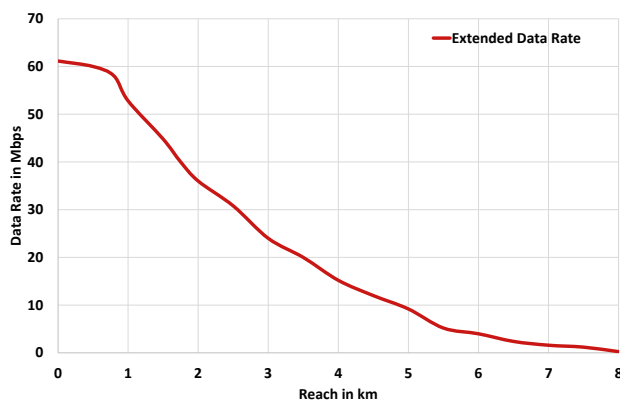


### SHDSL Applications and Benefits

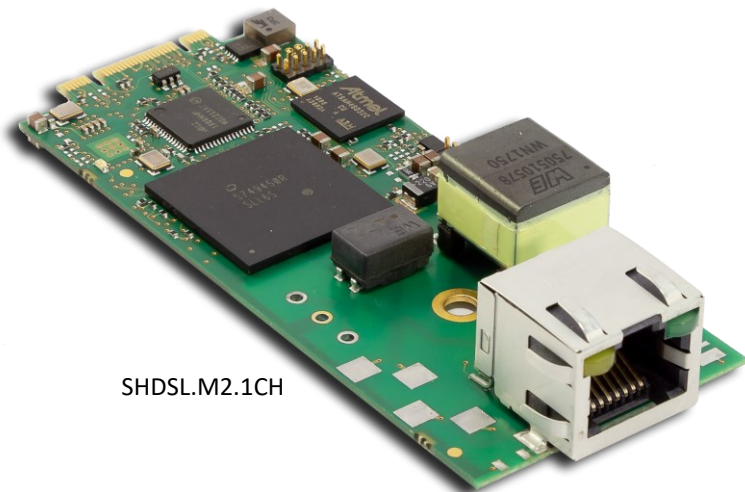
Nothing beats SHDSL when it comes to high data rate requirements on long copper loops. Many new communication challenges across the telecom, industrial and smart city markets require robust broadband connections over long distances. Designers are turning to SHDSL for new applications such as: surveillance cameras, vending machines, public displays, traffic control and industrial communication.

### Up to 15, 30 and 60 Mbps or 8 Kilometers

- The MaxLinear® SHDSL Chipset supports up to 15 Mbps for 1CH, up to 30 Mbps for 2CH and up to 60 Mbps for 4CH
- Customers using Intel® SHDSL Chipset in the field have achieved broadband speeds at distances over 8 km



Rate/Reach Performance Measurement of Intel® SHDSL Chipset. Extended Data Rate, cross-talk-cancelled, sequential startup, 4-pair bonding, standard twisted copper pair phone cables, no alien noise



SHDSL.M2.1CH

### SHDSL-EFM Modem

- Single or quad channel MaxLinear® SHDSL Chipset transceiver
- Selectable bitrate (including auto mode)
- Use as EFM Modem, SHDSL-EFM-Module or Plug & Play Ethernet Extender (please see reverse side for more applications)
- M.2 connector (Key B+M)
- MaxLinear® Ethernet Controller I211 Series
- Made for universal enterprise CPE / IAD / Gateway / Router / PC / White Box CPE

### Engineering Services/ Project Support

- Hard- and software customization
- System integration and adaptation
- Performance and compliance testing

### Software Services and Features

- Basic status interface
- Advanced command line interface
- SHDSL standard and extended bitrates
- Multi-channel and multi-device support
- PAF-bonding up to 4 channels, optional hitless group changes
- Power Measurement Modulation Session (PMMS) for Line Probing
- Emergency freeze, test modes
- Advanced SHDSL state machine
- Configuration export and import, presets
- Basic ATM interworking and m-Pair-Bonding
- Basic networking, telnet- and webserver for remote management
- Bootloader and fail-proof multi-bank-upgrade
- Software license for binary or source code

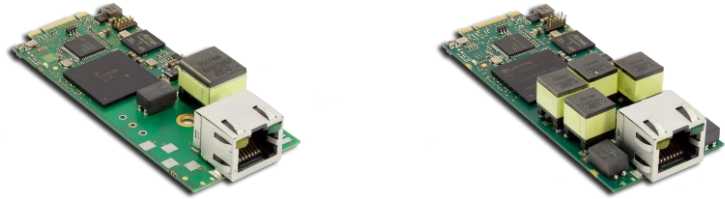
**More engineering services, software features and options on request!**

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## SHDSL.M2.1CH/4CH



### Specifications



	SHDSL.M2.1CH	SHDSL.M2.4CH
Dimensions (L x W x H)	85 x 35 x 13,5 mm	
Weight	18 g	26 g
Connector	M.2, 1x RJ45 for SHDSL	
M.2 key	B or M	
SHDSL chipset	Intel® SHDSL Chipset (PEF 21628 E)	Intel® SHDSL Chipset (PEF 24628 E)
Supported standards	ETSI SDSL, ETSI SDSL.bis, IEEE EFM, ITU G.shdsl, ITU	
Data rate	15 Mbps	60 Mbps
Supported unit modes	STU-C / CO, STU-R / CPE and SRU / Repeater	
Connection	PCIe via M.2 (one lane)	
Management	ITU-T 997.1 compliant	
Impulse overvoltage protection	K.21 enhanced* (6kV Surge and Power Contact)	1,5 kV
Temperature range	0°C to +40°C	

\*... optional

