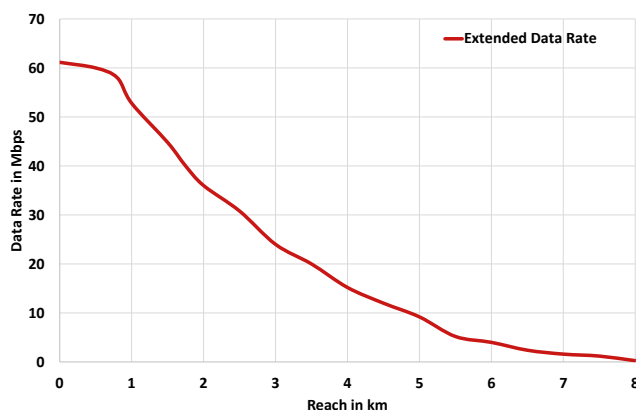# SOCRATES Series
## SHDSL.EVB.4CH
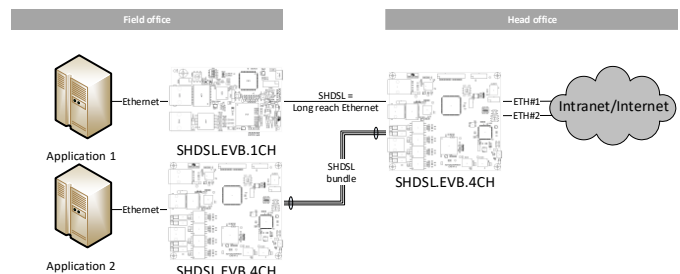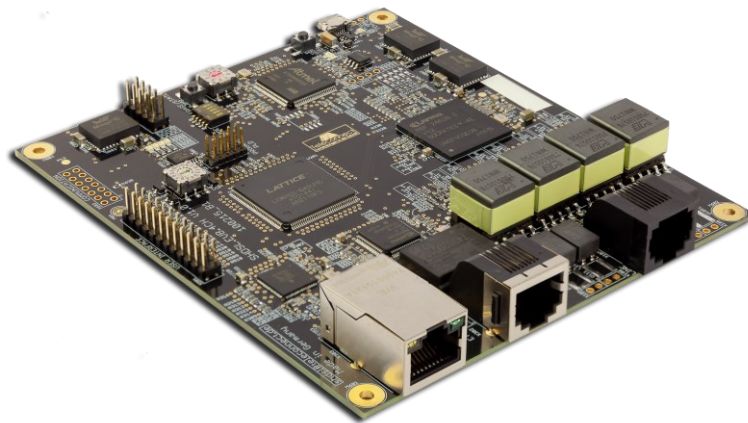
**teleconnect**

## 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.

## 60 Mbps or 8 Kilometers

- The Intel® SHDSL Chipset supports up to 60 Mbps using four-pair bonding
- 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



## 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

## SHDSL-EFM Modem

- Quad channel Intel® SHDSL Chipset transceiver
- Selectable bitrate (including auto mode)
- Use as EFM Modem, SHDSL-EFM-Module, Plug & Play Ethernet Extender etc. (please see reverse side for more applications)
- USB EIA232 emulation or TTL compatible EIA232 interface
- Basic on-board evaluation software

## Engineering Services/ Project Support

- Attractive pricing for software licenses
- Hard- and software customization
- System integration and adaptation
- Performance and compliance testing

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

Technology contribution from **intel**

# SOCRATES Series
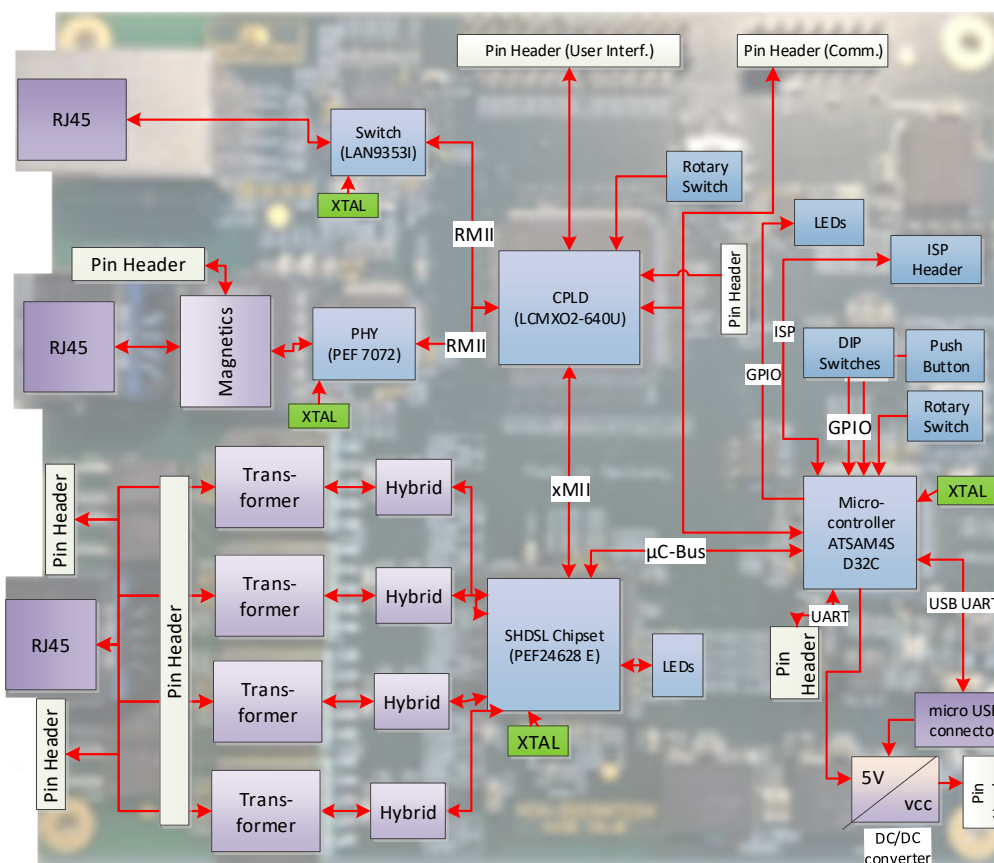## SHDSL.EVB.4CH

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## Specifications

| | |
|---|---|
| Dimensions (L x W x H) | 110 x 125 x 17 mm |
| Weight | 98 g |
| Connector | 1x RJ45 for SHDSL (4 lines), 1x RJ45 to Ethernet PHY, 1x RJ45 to Ethernet Switch |
| xDSL chipset | Intel® SHDSL Chipset (PEF 24628 E) |
| Supported standards | ETSI SDSL, ETSI SDSL.bis, IEEE EFM, ITU G.shdsl, ITU G.shdsl.bis, ITU G.hs, ITU G.bond |
| Supported unit modes | STU-C / CO, STU-R / CPE and SRU / Repeater |
| Power supply | +5V via Micro USB connector |
| User interfaces | TTL compatible RS232/ EIA232 interface and emulation via USB |
| Protection | basic primary protection, secondary protection |
| Temperature range (chipset) | -40°C to +85°C |

### Also available as 1 channel version (SHDSL.EVB.1CH).



### Available from our partner:

**WÜRTH ELEKTRONIK**

## Possible Applications

- EFM Modem with bonding or 4 single lines
- SHDSL-EFM-Module
- Plug & Play Ethernet Extender
- SHDSL Linecard
- SHDSL Ring
- Dual Bearer Mode
- SHDSL Repeater
- TDM over SHDSL

Technology contribution from **intel**