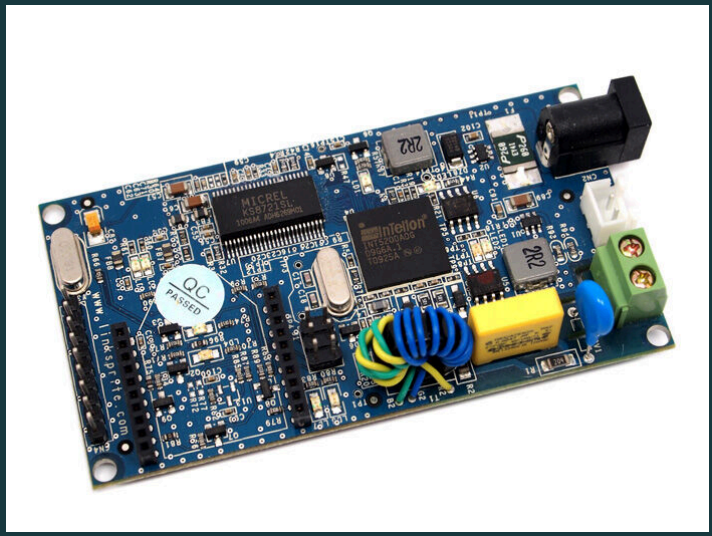
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INDUSTRIAL PRODUCT DATASHEET

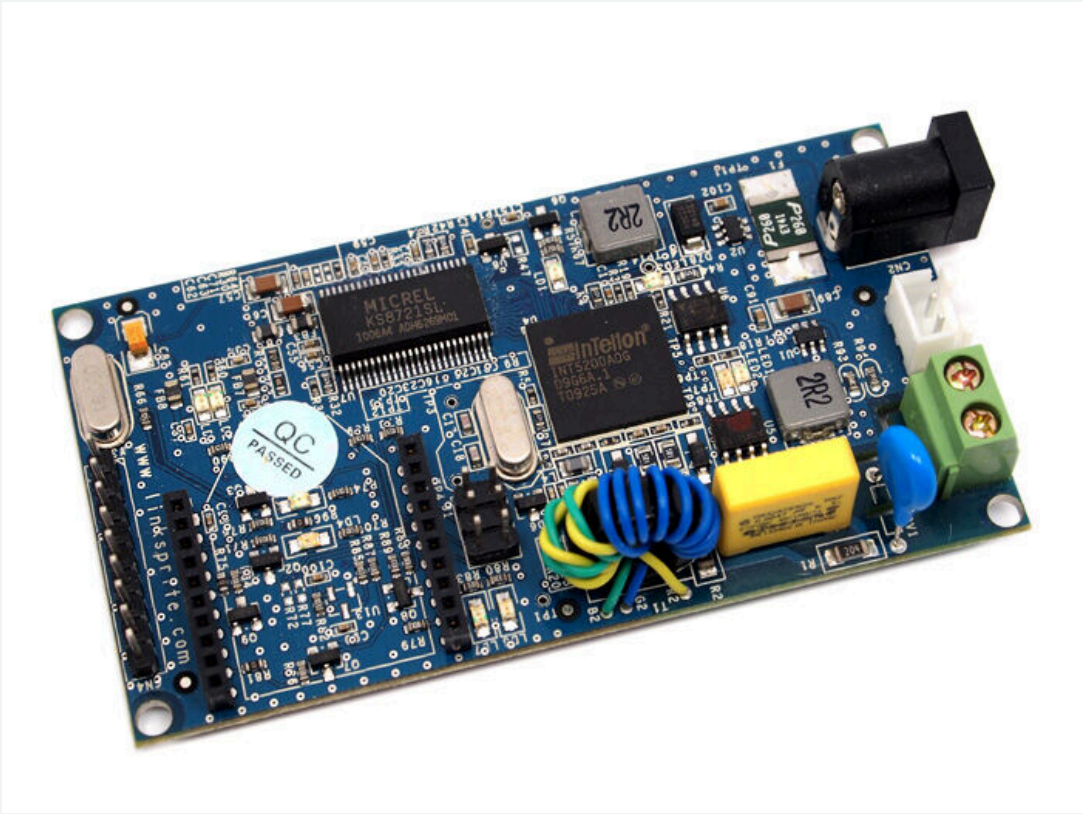
McLaren - High Speed Power Line Communication Modem

McLaren offers high-speed, Arduino-compatible power line communication with up to 5Mbps and flexible interface support.

SKU	UPDATED	PRICE
PLC11011B	2024-08-09 02:11:40	$55.00(Excl. VAT)



Overview



The McLaren High Speed Power Line Communication Modem enables data exchange over AC power lines using PLC technology in an Arduino-compatible environment. It supports up to 5Mbps data rates and flexible interface options including TTL, RS232, RS485, USB, Ethernet, and Zigbee via an Xbee socket.

Key Features

Power Line Communication (PLC) is a technology that exchanges data via the AC electric power line. McLaren is a board that allows you to take advantage of PLC technology in familiar and user-friendly Arduino environment via the SPI interface, providing you a neat and fresh home automation solution with up to 5Mbps high speed in power line.

McLaren has an Xbee socket on the board that is populated for interface conversions. It supports daughter boards of TTL, RS232, RS485, USB, Ethernet and Zigbee interfaces. You can refer to the datasheet for specific configuration of each interface type.

To transmit or receive data from the electric power line, plug the Live Line and Null Line into the screw terminals and power the board up by the JST connecter or power jack. Then you are ready to enjoy the developed invisible electric wiring network and build home automation projects without massive wireless devices.

We have two PLC products in stock, McLaren and Spyder. McLaren features up to 5Mbps high speed while **Spyder** has a wider input voltage range. A careful comparison between them is recommended before purchase.

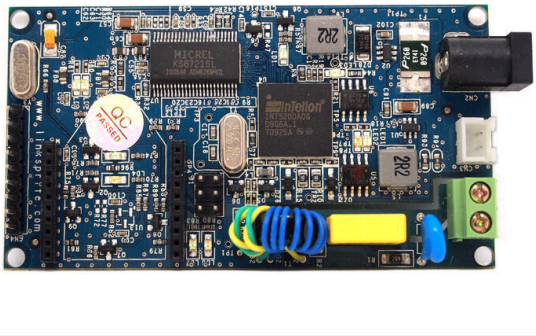
Features

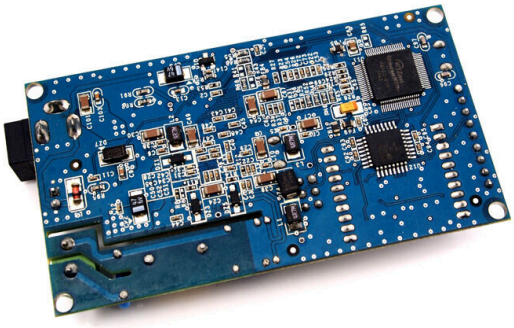
- Solution for Power Line Communication
- High Speed: 5Mbps in the power line
- Support flexible interfaces
- Arduino compatible: Atmel328p inside

Specifications

- Interfaces supported: 3.3V TTL UART, RS232, RS485, USB, Ethernet and Zigbee
- Line voltages supported: 230VAC/50Hz, 110VAC/60Hz, 0 – 400V/DC
- Operating voltage: 5V 2A DC
- Modulation: OFDM(Homeplug 1.0 Compatible)
- Error correction: Forward Error Correction
- Max packet data length: 200 bytes
- Data rate: 5Mbps(throughput)
- Max transmission distance: 300ft(no repeater)
- Max node number: 65535

Product Gallery





Resource Links

- https://www.seeedstudio.com/McLaren-High-Speed-Power-Line-Communication-Modem-p-1291.html

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