

## 100BASE-T1 Module (50W, 5W)

MegaChips developed two types of 100BASE-T1 module integrating 100BASE-T1 compliant Ethernet PHY IC: MAAE1003S with PoDL(Power over Data Line) feature. One is for 50W power supply, and another is for 5W. Those modules allows to send data and supply power over one single-pair of twisted cables and enables wiring costs reduction.

### ■ Features

#### 1. 100BASE-T1 compliant Ethernet PHY with PoDL module

Stable 100Mbps communication and power supply (5W, 50W) over UTP/STP cable.

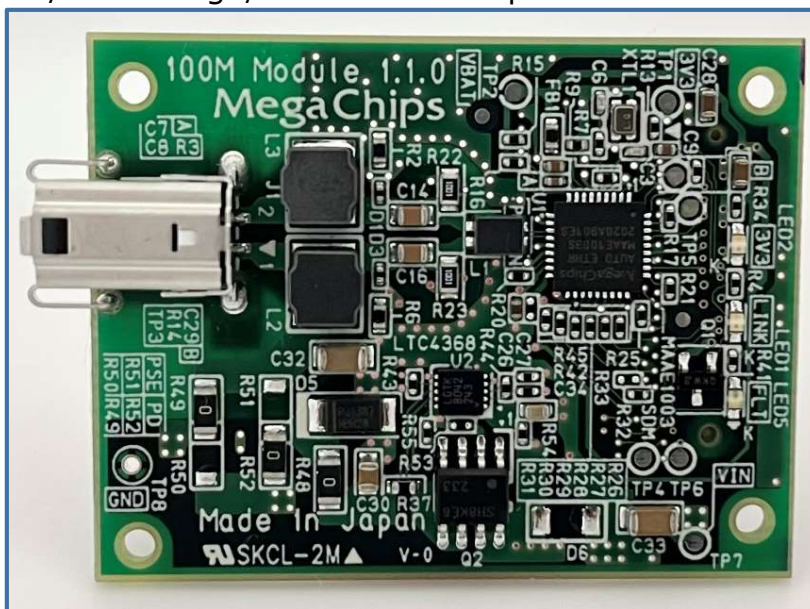
#### 2. PoDL (Power over Data Line)

Class 3(12V/471mA, 5W) and class 9 (48V/1.36A, 50W) are available.

#### 3. Abnormality detection and power supply protection

Capable of detecting wire breakage or short circuit, and controlling the power supply by overcurrent/overvoltage/reverse current protection functions.

### ■ Exterior photo



100BASE-T1 Module (PoDL 5W)

### ■ Specification

Specification	100BASE-T1 (802.3bw compliant) PoDL class 3 / 9 (802.3bu compliant)	Power supply	Module power 3.3 V Single PoDL power supply 12V ~ 48V (May be able to support other power range)
Size	47.5 x 36.5 [mm]	Power saving	Supply sleep mode
Temperature range	0°C ~ +105°C	Support function	<ul style="list-style-type: none"> <li>• Wire breakage detection</li> <li>• MDI polarity reversal detection/automatic protection</li> <li>• Overcurrent protection</li> <li>• Overvoltage protection</li> <li>• Others (Refer to the product specification for details. )</li> </ul>
Number of channels	1-Port		
Data rate	100Mbps		
MAC I/F	MII, RMII, RGMII	Cable side Connector Model No.	Japan Aviation Electronics Industry : DZ17S002D11 HARTING : 0945 181 2810XL(body) 0945 500 2812(port)