# PulM-1G4T-1211



Intel® Ethernet Controller I211 based Network Interface Card with 4 x 1GbE RJ-45 by 4 PCle 2.0 x2 Interface



## **Features**

- 4 x Intel® Ethernet Controller I211-AT
- 4 ports RJ-45 connector
- 4 PCle 2.0 x 2
- LAN Bypass (PulM-1G4T-I211-BP)
- RoHS compliant

#### ▲ PulM-1G4T-I211-BP

# Specifications

Model Name	PulM-1G4T-I211	PulM-1G4T-I211-BP		
Form Factor	IEI Networking	IEI Networking Module - PulM		
NIC	Intel® Ethernet C	Intel® Ethernet Controller I211-AT		
LAN Bypass	No	Yes, two pairs		
LAN Interface	RJ-45			
Ports	4 x Intel® I211-AT Ethernet Controller			
Host Interface	4 PCle	4 PCle 2.0 x2		
Storage Temp.	-20°C ~ 75°C (-4°F ~ 167°F)			
Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)			
Humidity	5% ~ 90% RH, Non-condensing			
Dimensions (mm)	165.50 (L) x 77.8 (W) x 44.2 (H)			
Compliance	RoHS			

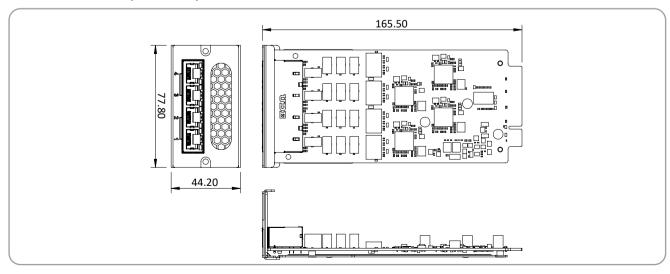
# Packing List

1 x PulM-1G4T-I211 or PulM-1G4T-I211-BP module	1 x L-shaped T10 Plum Wrench
2 x Trox Screws	1 x QIG

## Ordering Information

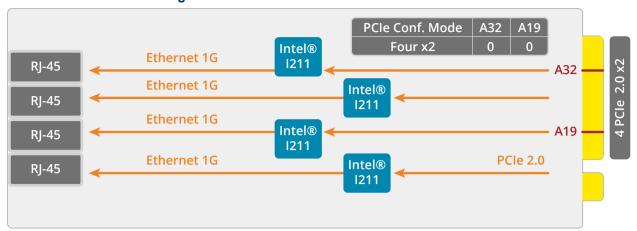
Part No.	Description
PulM-1G4T-I211-R10	Intel® I211 Ethernet controller based network interface card with four 1GbE RJ-45 without bypass, four PCIe 2.0 x2 interfaces, RoHS
PulM-1G4T-I211-BP-R10	Intel® I211 Ethernet controller based network interface card with four 1GbE RJ-45 with bypass function, four PCle 2.0 x2 interfaces, RoHS

# Dimensions (Unit: mm)

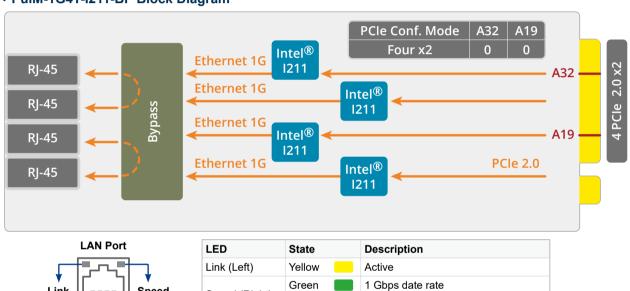


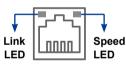
# Block Diagram

## ▼ PulM-1G4T-I211 Block Diagram



### **▼ PulM-1G4T-I211-BP Block Diagram**





LED	State	Description	
Link (Left)	Yellow	Active	
Speed (Right)	Green	1 Gbps date rate	
	Orange	100 Mbps data rate	
Off (Left/Right)	Off	Bypass function (PulM-1G4T-I211-BP)	

# **Bypass Configuration in BIOS**

Some PulM modules support bypass. To enable/disable bypass function, configure the BIOS menu of the PUZZLE series as described below.



Go to Chipset → PCH - IO Configuration → NETWORK Configuration (Bypass Setting)

Aptio Setup Utility - Co Chipset	pyright (C) 2018 America	n Megatrends, Inc.
PCH-IO Configuration Auto Power Button Status Status Restore AC Power Loss	[Disable (ATX)] [Last State]	Select AC power state when power is reapplied after a power failure.
> PCI Express Configuration > SATA And RST Configuration > NETWORK Configuration (ByPas	s Setting)	→ : Select Screen  ↑ : Select Item Enter: Select
M.2 B Key (M2_1) Device selection	[SATA]	+/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized
Module B Configuration	[PCIEx4 x 2]	Defaults F4: Save & Exit ESC: Exit
Version 2.20.1271. Copy	right (C) 2018 American	Megatrends, Inc.



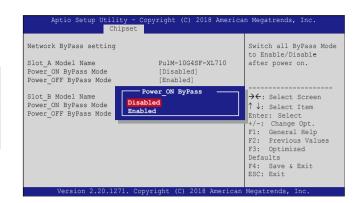
The Network ByPass Setting menu appears. The model names of the PulM module installed in the PUZZLE series are shown.

Network ByPass setting  Slot_A Model Name Power_ON ByPass Mode Power_OFF ByPass Mode  Slot_B Model Name Power_ON ByPass Mode Power_OFF ByPass Mode  Slot_B Model Name Power_OFF ByPass Mode [Enabled]  Fower_OFF ByPass Mode Power_OFF ByPass Mode  Fower_OFF ByPass Mode  Fower_OF	Aptio Setup Utility - Chipset	Copyright (C) 2018 Americ	an Megatrends, Inc.
Slot_B Model Name PulM-1G4T-I211-BP Power_ON ByPass Mode Power_OFF ByPass Mode  [Enabled]  [Enabled]  Fire General Help Fire Yrevious Values Fire Optimized Defaults F4: Save & Exit	Slot_A Model Name Power_ON ByPass Mode	[Disabled]	after power on.
	Power_ON ByPass Mode	[Disabled]	→ C: Select Screen  ↑ is Select Item Enter: Select  +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit



Configure the Power\_ON ByPass Mode and the Power\_OFF ByPass Mode BIOS options to enable/disable bypass function of the installed PulM modules.

PUZZLE System	Power_ON Bypass Mode		Power_OF	
BIOS Setting	Disabled	Enabled	Disabled	Enabled
PulM Bypass Modules	Close	Open	Close	Open



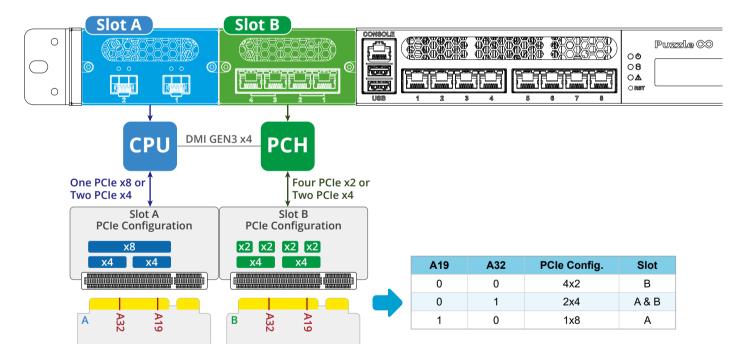


Press **F4** to save and exit the BIOS menu. The PUZZLE series will reboot with the new settings.

## **Hardware Installation**

Install the PulM-1G4T-I211 networking module into the slot of the PUZZLE series. The Slot A supports 8 lanes from CPU (1 PCIe x8 or 2 PCIe x4); the Slot B supports 8 lanes from PCH (2 PCIe x4 or 4 PCIe x2).

- When the PulM-1G4T-I211 is installed into the Slot A, only two LAN ports (port 1 & port 3) are active.
- When the PulM-1G4T-I211-BP is installed into the Slot A, only two LAN ports (port 1 & port 3) are active; however, the 2-pair bypass is still available.



# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

IEI:

PulM-1G4T-I211 PulM-1G4T-I211-BP