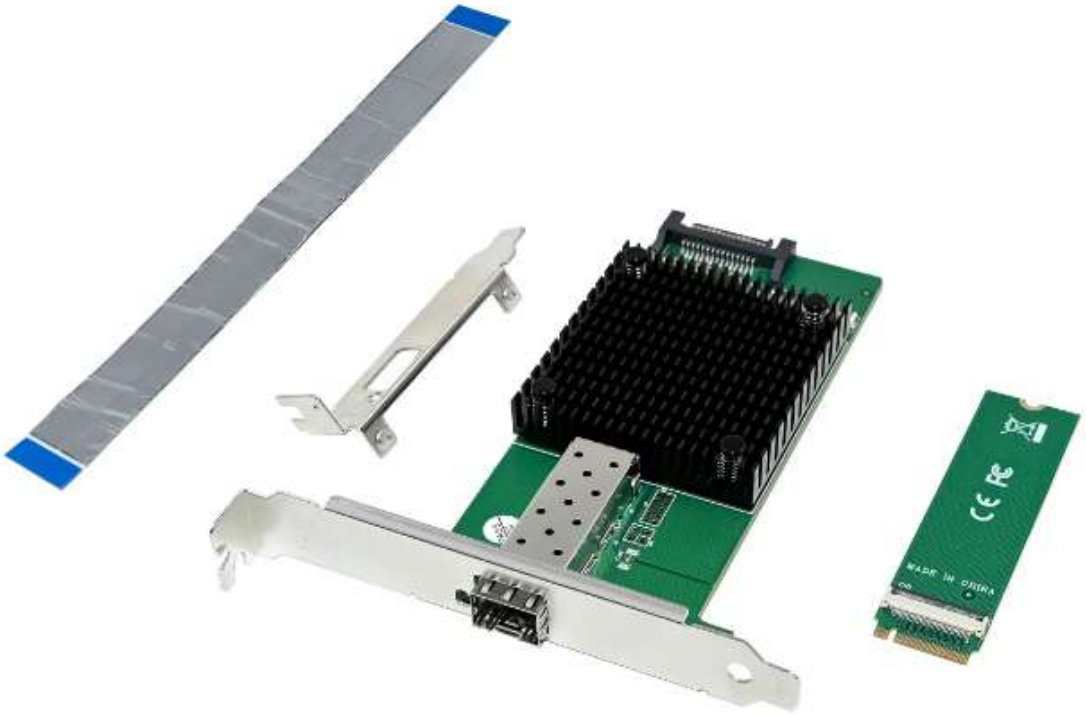
M.2 B+M KEY Intel X520 10GbE SFP+ Ethernet Card



P/N.: MC-M.2M-X520

USER Manual

EN ver2.0

Description

M.2 B+M KEY Intel X520 10GbE SFP+ Ethernet Card adopts Intel third- generation WMB network controller 82599EN, by providing unparalleled features of virtualization, flexible features of LAN and SAN network, and proven reliable performance, it solves the high requirements of the generation data center, it has Single 10Gps SFP+ port which can setup a long-distance link with a file server or a remote workstation.

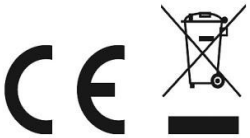
Specification

- Support M.2 B+M KEY with PCIe protocol
- PCI-Express host interface specification v2.0 with 5GT/s BUS width
- PCI-Express lanes: x4
- Supports a single 10GbE SFP+ port
- Complies with the IEEE802.3ae specification
- Layer 2 functions: IEEE 802.3x Flow Control - IEEE 802.1q VLAN
- Supports Receive-side scaling (RSS)
- Supports IPv 4, IPv 6 protocols
- Supports Jumbo Frames up to 15.5K
- Supports Checksum offloading
- Statistics for management and RMON
- Support for virtual machines device queues
- Interrupt throttling control to limit maximum interrupt rate and improve CPU usage
- Chipset: JL82599EN
- Drivers support for FreeBSD, Linux , VMWare ESXi, Win7/ Win-server2012/ Win-server2008/ Win8/Win8.1/Win-server2016/win10

Package content

- 1 x intel X520 mainboard network card
- 1 x m.2 2280 converter card

- 1 x User's Manual
- 1 x CD Driver
- 1 x Low profile bracket
- 1 x FPC Cable
- ~~Accessories~~



System Requirements

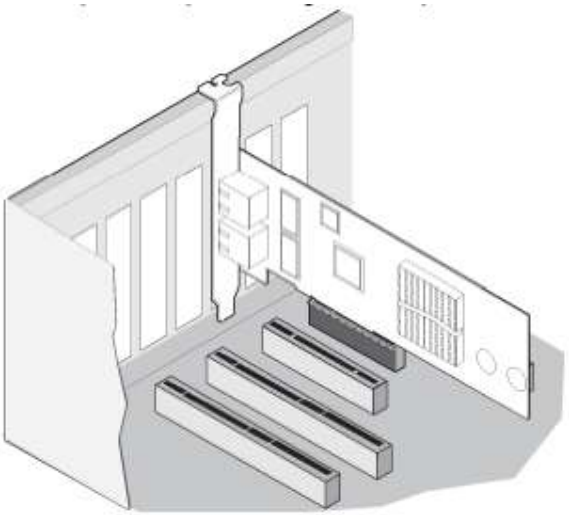
- FreeBSD, Linux , VMWare ESXi, Win7/ Win-server2012/ Win-server2008/ Win8/Win8.1/Win-server2016/win10
- Available PCI Express x8/x16 slot

Feature table

Product name	M2 B+M KEY INTEL X520 Single-Port 10G SFP+ Ethernet card
Media type	Fiber SFP+
Interface type	M.2 B+M KEY with PCIe protocol
Bus width	PCI Express 2.0 x4
Transmission speed	10G/1Gbps
LED Indicators	LINK, ACTIVITY
chipset	INTEL JL82599EN
Network interface	10GBASE-KX4,1000BASE-BX,10GBASE-CX4,10GBASE-KR, 10GBASE-BX4,IEEE802.3ae,IEEE802.3ak,IEEE802.3ap,IEEE1588v2
Jumbo frame	15.5KB
Intel Virtualization Technology	On-chip QoS and Traffic Management, flexible port partitioning, virtual machine device Queues, SR-IOV
Advanced software	AFT,SFT,ALB,Teaming,IEEE802.3ad,IEEE802.3 flow control,IEEE802.1P,TCP/IP offload
Storage Over Ethernet	iSCSI, FCoE, NFS,UEFI,PXE
Power Consumption	4.8w maximum
Operating Temperature	0℃-70℃
Operating systems	UEFI/FreeBSD8.0/LINUX/Windows 7/Vista/8/8.1/10, Windows server2003 SP2/server2008 SP2/R2/R2 Core/server2012/SERVER2016/SERVER2019/SERVER20222

Hardware installation

1. Turn off the computer and unplug the power cord
2. Remove the computer cover and the adapter slot cover from the slot that matches your adapter
3. Insert the adapter edge connector into the slot and secure the bracket to the chassis



CAUTION: Some PCI Express adapters may have a short connector, making them more fragile than PCI adapters. Excessive force could break the connector. Use caution when pressing the board in the slot.

4. Replace the computer cover ,then plug in the power cord
5. Power on the computer

Note: select the correct slot, some systems have physical X8 PCI Express slots those actually only support lower speeds. Please check your system manual to identify the slot

Install Drivers and software

Windows○,R Operating Systems

You must have administrative rights to the operating system to install the drivers.

1. insert the CD driver bound with Intel network driver into your CD-ROM drive(also you can download the latest drivers from support website):
2. if the Found New Hardware Wizard screen is displayed, click **Cancel**
3. start the autorun located in the software package, the autorun may automatically start after you have extracted files.
4. Click **install Drivers and Software**
5. Follow the instructions in the install wizard to finish it

Installing Linux Drivers from Source Code

1. Download and expand the base driver tar file.
2. Compile the driver module
3. Install the module using the modprobe command
4. Assign an IP address using the ifconfig command

Support

More information and settings, please refer to the Intel Adapter User Guides or you can contact us.