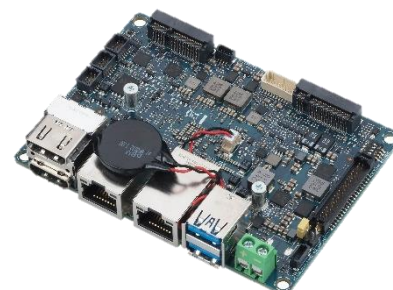


X621EP-IM-AA, X641EP-IM-AA, X642EP-IM-AA, X6425REP-IM-AA

2.5" PICO-ITX, Intel® Atom® Processor, LPDDR4x on board, Dual HDMI, LVDS/eDP, Dual-LAN, 12-24V DC

Features

- All-in-one onboard memory / storage design
- Supports 2.5GbE & 1GbE Ethernet for various data transmission.
- Support a wide DC power input range (12~24 VDC)
- Support TPM 2.0 on board or optional
- Support harsh industrial temperature (-40 ~ 85°C)
- Support robust ASUS IoT industrial chassis (EBS-P300W system)



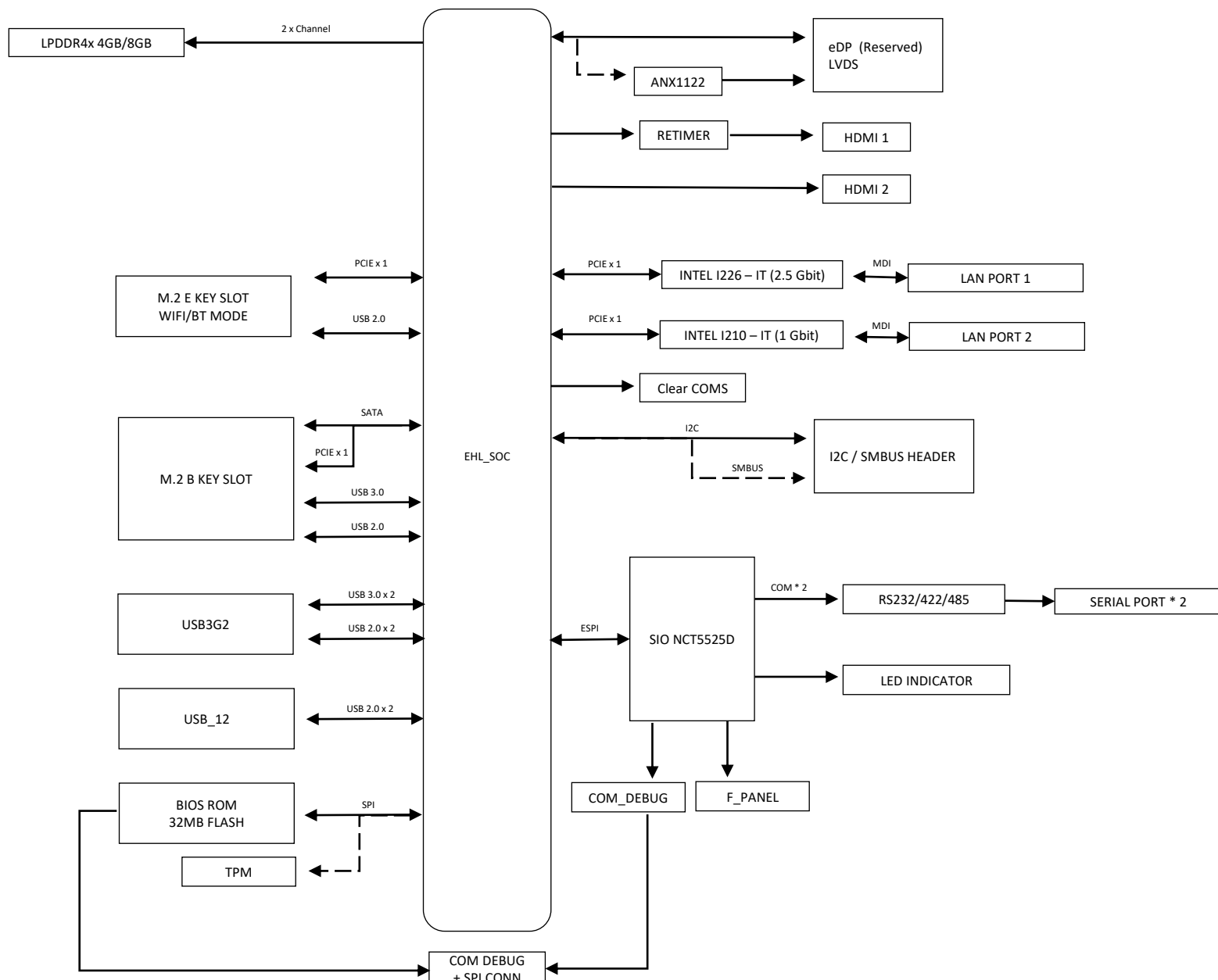
Specifications

	CPU	Atom, x6211E	Atom, x6413E	Atom, x6425E	Atom, x6425RE
Processor System	Max. Frequency	3.0GHz	3.0GHz	3.0GHz	N/A
	Base Frequency	1.3GHz	1.5GHz	2.0GHz	1.9GHz
	Core/Tread	2/2	4/4	4/4	4/4
	CPU TDP	6W	9W	12W	12W
Memory	Technology	LPDDR4x	LPDDR4x	LPDDR4x	LPDDR4x
	Max.	8 GB	8 GB	8 GB	8GB
Storage	EMMC	64 GB	64 GB	64 GB	128GB
Display	HDMI	2, 1 x HDMI 2.0, 1 x HDMI 1.4			
	LVDS	1 (Colay with eDP) (BOM Option)			
	Multiple displays	Max. 3 displays, HDMI+HDMI+LVDS, HDMI+HDMI+eDP			
Expansion Slot	M.2	1 x 2230 M.2 E key for WIFI/BT device 1 x 2242 M.2 B Key (Support SATA /PCIe Storage)			
Ethernet	Speed	10/100/1000/2500 Mbps			
	Controller	1x Intel® I226-IT (2.5 Gbe) & 1 x Intel i210-IT (1 Gbe)			
	Connector	2 x RJ-45			
Storage	EMMC	64GB /128GB			
	M.2	1 x 2242 M.2 B Key			
Rear I/O	HDMI	2			
	USB 3.2	2			
	Ethernet	2x RJ45			
	Power Type	Lockable Phoenix Terminal (Colay Lockable DC Jack)			
	LED indicators	1, PCB Back			
Internal Connector	Serial Port	2 x RS232/422/485			
	USB2.0	1 header for 2 ports			
	GPIO	1 x Header (8 Bit)			
	System Panel	1 x Header			
	Display Panel VCC Power Selection jumper	1 x Header			
	I2C Connector	I2C/ SMBUS (I2C as default, SMBUS selected by HW BOM)			
	Backlight control	1			
	Clear CMOS	1			
	AT/ATX Select	1			

Specifications

Security	TPM	TPM2.0, TPM on board (Infineon SLB 96xx) (optional)
Power Type	Power Type	Lockable Phoenix Terminal (Colay Lockable DC Jack)
	Voltage	12V-24V DC Input
OS & Software Support	Microsoft Windows	Windows® 10 (64bit) / Windows® IoT enterprise
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE
	ASUS IoT Suite	☒ HW Monitor ☒ Power Scheduling ☒ Fan Control ☒ Watch Dog Timer ☒ GPIO ☒ I2C ☒ Linux GPIO Sample code
		☒ API ☒ GUI
	User Interfaces	
Environment	Operating Standard	0~60° C
	Operating Extend	-40~85° C
	Storage Temperature	-40~85° C
	Relative Humidity	Operational humidity: 40°C@10%~95%
Mechanical	Dimensions	3.94" x 2.84" (100mm x 72mm)
Certification	EMC ,Safety	CE, FCC, BSMI, VCCI, ISED, CE-LVD

Block Diagram



Ordering Information

Model Name	Part Number	Description
X6425REP-IM-AA	90ME06T1*	x6425RE, LPDDR4x 8GB, HDMI, LVDS, MB
X642EP-IM-AA	90ME06U1*	x6425E, LPDDR4x 8GB, HDMI, LVDS, MB
X641EP-IM-AA	90ME06S1*	x6413E, LPDDR4x 8GB, HDMI, LVDS, MB
X621EP-IM-AA	90ME06R1*	x6211E, LPDDR4x 8GB, HDMI, LVDS, MB

Packing List

Part number	Description	Quantity
14013*	USB2.0 CABLE	1
14011*	COM CABLE	1

* The part number might vary due to part number revision.