Embedded Single Board for OEM/ODM

ONYX EPIC-CFS7

EPIC Board with 8th Generation Intel® Core™ i-S series Processor (Socket Type)



Features

- 8th Generation Intel® Core™ i-S Series Processor (Socket Type)
- 12V Only, DDR4 (ECC support) SODIMM x 2, 2666MHz, up to 32 GB
- HDMI1 / HDMI2 Display
- SATA 6.0 Gb/s x 1
- USB 3.2 Gen 2/USB2.0 x 4 (Rear I/O), USB 2.0 x2 (Internal)
- RS-232/422/485 x 2
- PoE x 2 (Onboard design, support 802.3af only)
- mSATA/Mini-PCle x 1 (Full size) (H310: By BOM change, Q370: By BIOS Change for mPCle)
- Daughter Board: Additional PoE x 2 (Expansion from PCle[x4] FPC slot, support 802.3af only); Isolated DIO 32 bit (16 in/16 out)



Specifications

System

system 	
Form Factor	4" EPIC Board
CPU	8th Generation Intel® Core™ Processor family
CPU Frequency	Up to 4.6 GHz
Chipset	Intel® H310/Q370 (TDP: 6W)
Memory Type	SODIMM DDR4 (ECC) Memory slot x 2
Memory Capacity	Up to 32 GB
BIOS	UEFI Only
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V
Power Supply Type	AT / ATX (ATX mode for system level)
Power Consumption	TBD
Dimension (L x W)	115 x 165mm (EPIC Board Level)
	216 x 180 x 65mm (System level)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0 ~ 90% @ 40°C, non-condensing
MFTB (Hours)	TBD
Certification	CE / FCC Class A
Display	
VGA / LCD Controller	8th Generation Intel® Core™ Processor family
Video Output	HDMI x 2
Backlight Inverter	_
Supply	
/O	
	Intel® I211 GbE x 4 (Support PoE 802.3af)
/O	Intel® I211 GbE x 4 (Support PoE 802.3af)
/O Ethernet	Intel® I211 GbE x 4 (Support PoE 802.3af) — USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header)
Ethernet Audio	— USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O)
Ethernet Audio USB Port	USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header)
Ethernet Audio USB Port Serial Port	USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header)
Ethernet Audio USB Port Serial Port Parallel Port	— USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header) RS-232/422/485 x 2 (Internal header) —
Ethernet Audio USB Port Serial Port Parallel Port HDD Interface	— USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header) RS-232/422/485 x 2 (Internal header) —
Ethernet Audio USB Port Serial Port Parallel Port HDD Interface SSD	USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header) RS-232/422/485 x 2 (Internal header) SATA 3.0 x 1 PCIe[x4] FPC slot (For PoE card) Full Size mSATA/mPCIe slot x 1 LPC Bus
Ethernet Audio USB Port Serial Port Parallel Port HDD Interface SSD Expansion Slot	USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header) RS-232/422/485 x 2 (Internal header) SATA 3.0 x 1 PCle[x4] FPC slot (For PoE card) Full Size mSATA/mPCle slot x 1 LPC Bus SMBus (default) / I2C (option)
Ethernet Audio USB Port Serial Port Parallel Port HDD Interface SSD Expansion Slot	USB 3.2 Gen 2/ USB2.0 x 4 (Rear I/O) USB 2.0 x 2 (Internal header) RS-232/422/485 x 2 (Internal header) SATA 3.0 x 1 PCle[x4] FPC slot (For PoE card) Full Size mSATA/mPCle slot x 1 LPC Bus SMBus (default) / I2C (option)

