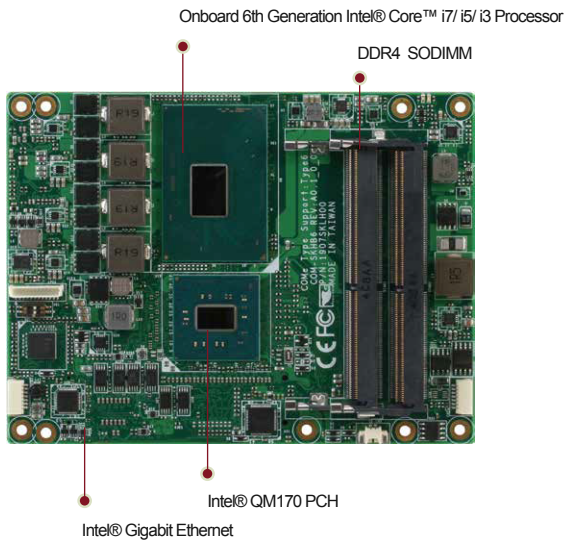


Onyx Single Board Computer Unit

COM-SKHB6

COM Express Type 6 Basic Size with 6th Gen Core H-series Processor



Features

- 6th Gen. Intel® Core™ i3/i5/i7 Processor with PCH QM170
- DDR4 SODIMM x 2, up to 32 GB, ECC Support
- Gigabit Ethernet x 1
- 18/24-bit Dual Channel LVDS LCD/eDP, DDI x 2 (Default DP Signal), VGA, High Definition Audio Interface
- SATA x 4
- USB2.0 x 8, USB3.0 x 4, GPIO 8-bit, PCI-Express [x1] x 8, PCIe[x16] x 1
- COM Express Type 6 Basic Size 125mm x 95mm

Specifications

Main Specifications

Processor	Onboard 6th Gen Intel® Core™ H-series Processor, BGA type
CPU Frequency	Up to i7-6820EQ 2.8 GHz, vPro™
Chipset	Onboard 6th Gen Intel® Core™ H-series Processor
System Memory	DDR4, SODIMM x2, ECC Support, 32GB Max.
Expansion Interface	PCIe[x16] x 1, PCIe[x1] x8, I2C, LPC, SMBus
BIOS	AMI BIOS, Legacy Free
Wake on LAN	Yes
Watchdog Timer	255 levels

I/O

USB	USB2.0 x8, USB3.0 x4
Serial Port	2-Wire UART (Tx/Rx) x2
Ethernet	Intel I219, Gigabit Ethernet
Storage	SATA x 4
Audio	HD Audio x 1
Graphic Chipset	Onboard 6th Gen Intel® Core™ H-series Processor, GT2
Video Output	VGA, LVDS/eDP, DDI x2
DIO	GPIO 8-bit
TPM	Optional

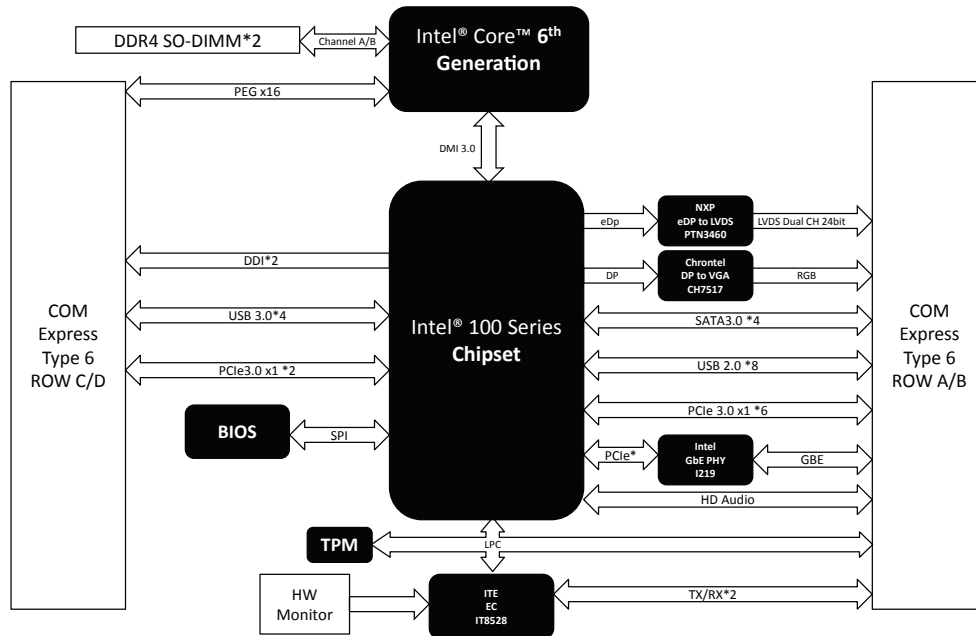
Mechanical and Environmental

Power Requirement	Standard: +12V
Power Supply Type	AT/ATX Selection
Power Compliance	Intel i7-6820EQ 2.8GHz, DDR4 16GB, 3.08A@12V
Operating Humidity	10% ~ 90% relative humidity, non-condensing
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Dimensions(W x D x H)	4.92" x 3.75" (125mm x 95mm)
MTBF (Hours)	80,000

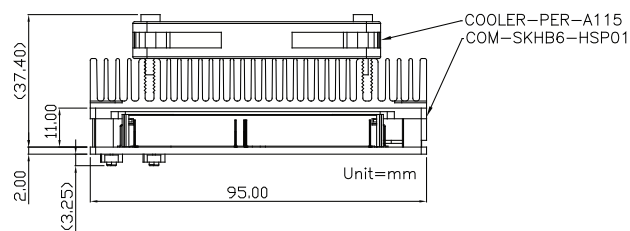
COM-SKHB6

COM Express Type 6 Basic Size with 6th Gen Core H-series Processor

Block Diagram



Dimension



Ordering Information

Part Number	Form Factor	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion	Power	Temperature	Other
COM-SKHB6-A10-0001	COM Express Type 6	i7-6820EQ, 2.8 GHz	DDR4 SODIMM x 2 (Max 32GB)	CRT, LVDS/eDP, DDI x 2	24bit, 2CH	SATA x 4	GbE x 1	USB3.0 x 4, USB2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x8, PCIe[x16] x 1	+12V (ATX)	0°C ~ 60°C	LPC,GPIO 8Bit, HDA, I2C, SMBus
COM-SKHB6-A10-0002	COM Express Type 6	i5-6440EQ, 2.6 GHz	DDR4 SODIMM x 2 (Max 32GB)	CRT, LVDS/eDP, DDI x 2	24bit, 2CH	SATA x 4	GbE x 1	USB3.0 x 4, USB2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x8, PCIe[x16] x 1	+12V (ATX)	0°C ~ 60°C	LPC,GPIO 8Bit, HDA, I2C, SMBus
COM-SKHB6-A10-0003	COM Express Type 6	i3-6100E, 2.7 GHz	DDR4 SODIMM x 2 (Max 32GB)	CRT, LVDS/eDP, DDI x 2	24bit, 2CH	SATA x 4	GbE x 1	USB3.0 x 4, USB2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x8, PCIe[x16] x 1	+12V (ATX)	0°C ~ 60°C	LPC,GPIO 8Bit, HDA, I2C, SMBus