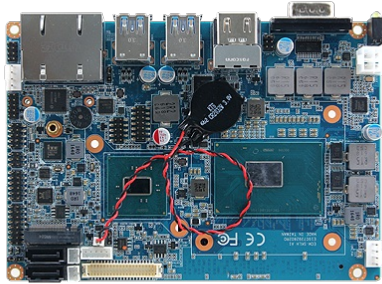




ECM-KBLH

7th Gen Intel®Core™ Processor i7/i5/i3
3.5" Micro Module with Intel® QM175 Chipset



- > Onboard 7th Gen Intel®Core™ i7/i5/i3 BGA Processor
- > One 260-pin DDR4 SODIMM Socket, Supports Up to 16GB DDR4 2400 SDRAM (only support non-ECC)
- > Dual-channel 18/24-bit LVDS,HDMI
- > Triple Display (LVDS, 2x HDMI)
- > 2 SATA III, 1 Mini PCIe, 4 USB 3.0,1 M.2 (2242) B-Key, 2 USB 2.0, 2 COM, 8-bit GPIO
- > HD Audio, Dual Gigabit Ethernet
- > TPM 2.0/1.2 (Both optional)
- > iAMT 11

+ Spec

-System Information-	
Processor	7th Gen Intel® Core™ i7-7820EQ 4-Core 3.0GHz processor 7th Gen Intel® Core™ i5-7440EQ 4-Core 2.9GHz processor 7th Gen Intel® Core™ i3-7100E 2-Core 2.9GHz processor
Platform Controller Hub	Intel® QM175 Express Chipset
System Memory	1 x 260-Pin DDR4 2400MHz SO-DIMM up to 16 GB
I/O Chipset	EC ITE IT8528E
BIOS Information	AMI uEFI BIOS, 128Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec.
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	
Expansion	1 x Mini PCIe Supports mSATA 1 x M.2 (2242)B-Key
Storage	
Storage	1 x mSATA Supported from Mini PCIe 1 x M.2 supports SATA or PCIe/USB
I/O	
USB Port	2 x USB 2.0 4 x USB 3.0
COM Port	1 x RS-232/422/485 1 x RS-232
SATA	2 x SATA III
DIO	1 x 8bit GPIO
MIO	1 x LPC 1 x SPI
Display	
Graphic Chipset	Intel® Kaby lake SoC integrated Graphics Supports triple display
Spec. & Resolution	HDMI: Max. resolution 4096x2160 @ 24Hz LVDS: Max. resolution 1920x1080 @ 60Hz LVDS + Dual HDMI Dual-channel 18/ 24-bit LVDS
Audio	
Audio Codec	Realtek ALC233 supports 2.1-CH
Audio Interface	Audio Amp.:2W
Certifications	
Certification Information	CE FCC Class B
Ethernet	
LAN Chipset	1 x Intel® I210AT 1 x Intel® I219LM
Ethernet Interface	10/100/1000 Base-Tx GbE compatible
LAN Port	2 x RJ-45
Mechanical & Environmental	
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.44lbs (0.2kg)
Power Requirement	+12V
ACPI	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant



Power Mode	AT/ATX
Dimension (L x W)	5.7" x 4" (146mm x 101mm)
Software Support	
OS Information	Win 10 Linux
Ordering Information	
Ordering Information	ECM-KBLH-7820-A1R 3.5"W/i7 7820EQ/2SATAIII/2COM/A1 ECM-KBLH-7440-A1R 3.5"W/i5 7440EQ/2SATAIII/2COM/A1 ECM-KBLH-7100-A1R 3.5"W/i3 7100E/2SATAIII/2COM/A1