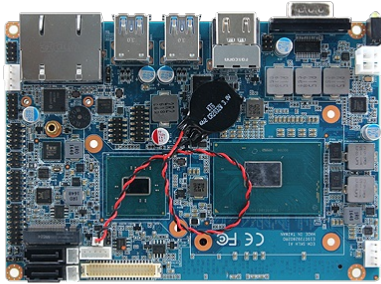




## ECM-KBLH

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	
<b>Processor</b>	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™ i3-71100E 2-Core 2.9GHz processor
<b>Platform Controller Hub</b>	Intel® QM175 Express Chipset
<b>System Memory</b>	1 x 260-Pin DDR4 2400MHz SO-DIMM up to 16 GB
<b>I/O Chipset</b>	EC ITE IT8528E
<b>BIOS Information</b>	AMI uEFI BIOS, 128Mbit SPI Flash ROM
<b>Watchdog Timer</b>	H/W Reset, 1sec. ~ 65535sec.
<b>H/W Status Monitor</b>	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	
<b>Expansion</b>	1 x Mini PCIe Supports mSATA 1 x M.2 (2242)B-Key
Storage	
<b>Storage</b>	1 x mSATA Supported from Mini PCIe 1 x M.2 supports SATA or PCIe/USB
I/O	
<b>USB Port</b>	2 x USB 2.0 4 x USB 3.0
<b>COM Port</b>	1 x RS-232/422/485 1 x RS-232
<b>SATA</b>	2 x SATA III
<b>DIO</b>	1 x 8bit GPIO
<b>MIO</b>	1 x LPC 1 x SPI
Display	
<b>Graphic Chipset</b>	Intel® Kaby lake SoC integrated Graphics Supports triple display
<b>Spec. &amp; Resolution</b>	HDMI: Max. resolution 4096x2160 @ 24Hz LVDS: Max. resolution 1920x1080 @ 60Hz LVDS + Dual HDMI Dual-channel 18/ 24-bit LVDS
Audio	
<b>Audio Codec</b>	Realtek ALC233 supports 2.1-CH
<b>Audio Interface</b>	Audio Amp.:2W
Certifications	
<b>Certification Information</b>	CE FCC Class B
Ethernet	
<b>LAN Chipset</b>	1 x Intel® I210AT 1 x Intel® I219LM
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ-45
Mechanical & Environmental	
<b>Operating Temperature</b>	0°C ~ 60°C (32°F ~ 140°F)
<b>Storage Temperature</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Weight</b>	0.44lbs (0.2kg)
<b>Power Requirement</b>	+12V
<b>ACPI</b>	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant



<b>Power Mode</b>	AT/ATX
<b>Dimension (L x W)</b>	5.7" x 4" (146mm x 101mm)
<b>Software Support</b>	
<b>OS Information</b>	Win 10 Linux
<b>Ordering Information</b>	
<b>Ordering Information</b>	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