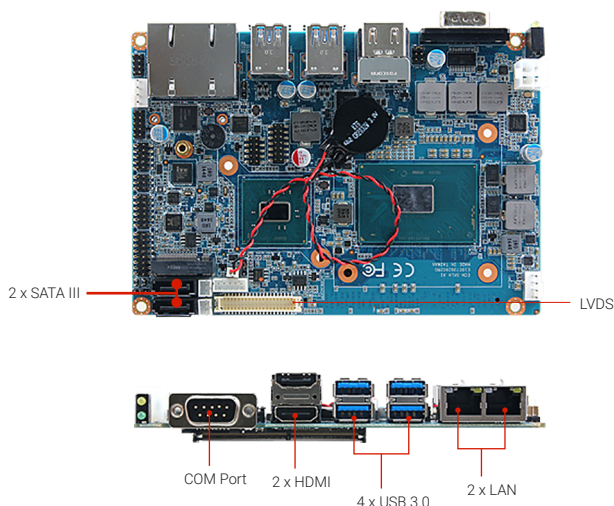


### Features

- Onboard 7th Gen Intel® Core™ i7/i5/i3 BGA Processor
- 1 x 260-pin DDR4 SODIMM Socket supports up to 16GB DDR4 2400 SDRAM (Non-ECC)
- Dual-channel 18/24-bit LVDS, HDMI
- Supports Triple Display (LVDS, 2 x HDMI)
- 2 x SATA III, 1 x mini-PCIe, 4 x USB 3.0, 1 x M.2 (2242) B-Key, 2 x USB 2.0, 2 x COM, 8-bit GPIO
- HD Audio
- Dual Gigabit Ethernet
- Optional TPM 2.0/1.2
- ME 11.6/11.7



### Specifications

System	
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
System Chipset	Intel® QM175 Express Chipset
System Memory	1 x 260-Pin DDR4 2400MHz SO-DIMM up to 16 GB
BIOS	AMI uEFI BIOS, 128Mbit SPI Flash ROM
I/O Chip	EC ITE IT8528E
Audio	Realtek ALC233 HD Audio
Ethernet	LAN 1: Intel® I210AT Gigabit Ethernet Controller LAN 2: Intel® I219LM Gigabit Ethernet Controller
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec.
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	1 x mini-PCIe supports mSATA 1 x M.2 (B-Key, 2242)
Storage	1 x mini-PCIe (mSATA) 1 x M.2 supports SATA or PCIe1/USB
Supported OS	Win 10, Linux

Display	
CPU	Intel® Kaby lake Processor Integrated Graphics Supports triple display
Resolution	HDMI: Max. Resolution 4096x2160 @ 24Hz LVDS: Max. Resolution 1920x1080 @ 60Hz Dual-channel 18/24-bit LVDS
Multiple Display	Supports Triple Display LVDS + 2 x HDMI

External I/O	
HDMI	2 x HDMI
LAN	2 x RJ45
USB	4 x USB 3.0

Internal I/O	
LVDS	1 x LVDS
USB	2 x USB 2.0
COM	1 x RS232/422/485
SATA	2 x SATA III
DIO	1 x 8-bit GPIO
MIO	1 x LPC, 1 x SPI

Mechanical and Environment	
Power Requirement	+12V
ACPI	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant
Power Type	AT/ATX
Operating Temp	0°C ~ 60°C (32°F ~ 140°F)
Storage Temp	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension	5.7" x 4" (146mm x 101mm)
Weight	0.44 lbs (0.2kg)
Certification Information	CE FCC Class B

Ordering Info	
ECM-KBLH-7820EQ	3.5" Intel® QM175 Core i7-7820EQ CPU Onboard
ECM-KBLH-7440EQ	3.5" Intel® QM175 Core i5-7440E CPU Onboard
ECM-KBLH-7100EQ	3.5" Intel® QM170 Core i3-7100E CPU Onboard

\* All product specifications and images are subject to change without notice. Last update: 2022/02/24

