

# ESM-SKLH

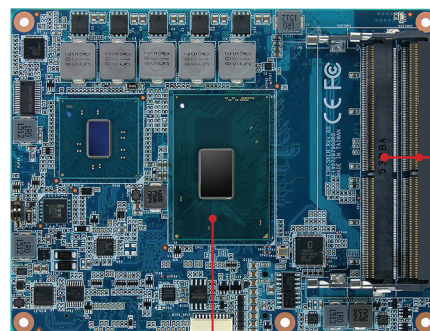
## COM Express Module

6th Gen Intel Core™ Processor i7/i5/i3 Type6 COMe Basic Module with Intel® QM170 Chipset

\* This is an OEM Only Product

## Features

- Onboard 6th Gen Intel® Core™ i7/i5/i3 Processor
- Two 260-pin SODIMM DDR4 SDRAM slot up to 32GB
- Dual-channel 18/24-bit LVDS, VGA, DP++/HDMI/DVI
- Optional eDP
- Intel® I219LM Gigabit Ethernet
- 8 PCIe x1, 1 PCIe x16, 4 SATA, 8 USB 2.0, 4 USB 3.0
- HD Audio Interface
- Type 6 Rev 2.1 Pin-out
- TPM 2.0



Onboard 6th Gen Intel® Core™ SoC  
i7/i5/i3/Celeron BGA Processor

Dual DDR4 SODIMM  
Up to 32GB DDR4  
2133 SDRAM

## Specifications

### System

<b>CPU</b>	6th Gen Intel® Core™ i7-6820EQ 4-Core 2.8GHz processor 6th Gen Intel® Core™ i5-6440EQ 4-Core 2.7GHz processor 6th Gen Intel® Core™ i3-6102E 2-Core 1.9GHz processor  Please note: CPU coolers are not included. Please see Ordering Info tab for more details.
<b>System Chipset</b>	Intel QM170
<b>System Memory</b>	2 x 260-Pin DDR4 SO-DIMM up to 32 GB
<b>Audio</b>	Intel® High Definition Audio
<b>Ethernet</b>	LAN1: Intel® i219LM Gigabit Ethernet Controller
<b>BIOS</b>	AMI uEFI BIOS, 128Mbit SPI Flash ROM
<b>I/O Chip</b>	EC ITE IT8528E
<b>Expansion</b>	8 x PCIe x1
<b>OS Support</b>	Win 10, Win 8.1, Win 7, Linux

### I/O

<b>USB</b>	8 x USB 2.0 4 x USB 3.0
<b>SATA</b>	4 x SATA III
<b>COM Port</b>	2 x UART
<b>DIO</b>	1 x 8-bit GPIO
<b>MIO</b>	1 x SMBus 1 x LPC 1 x I2C

### Display

<b>Chipset</b>	Intel® Skylake Integrated Graphics
<b>Resolution</b>	VGA: Max. resolution 1920x1080 @ 60Hz LVDS: Max. resolution 1920x1080 @ 60Hz HDMI: Max. resolution 4096x2304 @ 24Hz (HDMI Max resolution only one display output)
<b>LCD Interface</b>	CH7511B(eDP to LVDS)
<b>Multiple Display</b>	(VGA + DP++) + HDMI + DDI LVDS + (VGA + DP++) + DDI LVDS + (VGA + DP++) + HDMI LVDS + HDMI + DDI
<b>DDI</b>	HDMI DVI DisplayPort

### Mechanical & Environment

<b>Power Requirement</b>	+9V ~ +19V
<b>ACPI</b>	Single Power ATX Support S0, S3, S4, S5 ACPI 3.0 Compliant
<b>Power Type</b>	AT/ATX
<b>Operating Temp</b>	0°C ~ 60°C (32°F ~ 140°F)
<b>Storage Temp</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Form Factor</b>	COM Express Module
<b>Dimensions</b>	5" x 3.7" (125mm x 95mm)
<b>Weight</b>	0.44lbs (0.2kg)
<b>Certification Information</b>	CE FCC Class B

\* All product specifications and images are subject to change without notice.  
Last update: 2021/02/12

### Ordering Info

<b>ESM-SKLH-6820</b>	Intel® QM170 Core i7-6820EQ 2.8GHz Quad Core Type6 COMe Basic Module
<b>SM-SKLH-6440</b>	Intel® QM170 Core i5-6440EQ 2.7GHz Quad Core Type6 COMe Basic Module
<b>ESM-SKLH-6102R</b>	Intel® QM170 Core i3-6102E 1.9GHz Dual Core Type6 COMe Basic Module
<b>EEV-EX14-A2R</b>	mATX Ev. Board for COMe Type 6 A1.1
<b>ACC-ESMSKLH-CL-1R</b>	Cooler for ESM-SKLH/ESM-SKLA W/FAN H=43.5mm
<b>ACC-ESMKBLH-SD-1R</b>	Heatspreader W/O FAN H=8.0mm (for ESM-KBLH/ESM-KBLA/ESM-SKLH/ESM-SKLA)