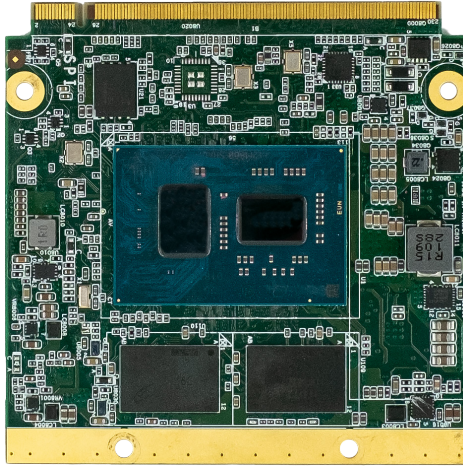


# EHL700

Atom



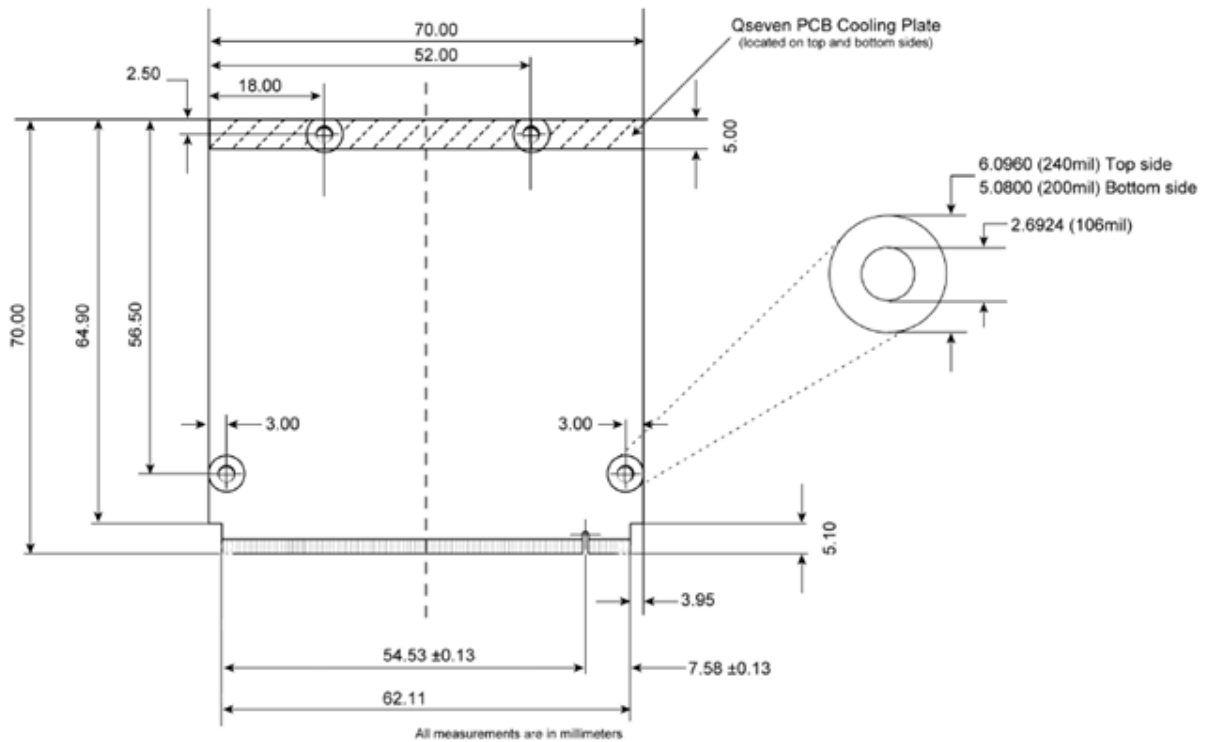
## Features

- 4GB/8GB LPDDR4 Single Channel Memory Down
- 1 DDI\*, 1 eDP
- Supports dual displays: eDP+1DDI
- DP++ resolution supports up to 4096x2160 @ 60Hz
- Multiple expansions: 4 PCIe x1
- Rich I/O: 1 Intel GbE, 2 USB 3.1, 8 USB 2.0

\* Populated by default



## Mechanical Drawing



Qseven Module Top Side

# EHL700

## Specifications

<b>SYSTEM</b>	<b>Processor</b>	Intel® Celeron® Processor J6413 Intel Atom® x6000 Series Processors Intel Pentium® N and J Series Processors Intel Celeron® N and J Series Processors	
	<b>Memory</b>	4GB/8GB LPDDR4 Memory Down Dual Channel LPDDR4 3200MHz	
	<b>BIOS</b>	AMI SPI 256Mbit (supports UEFI boot only)	
<b>GRAPHICS</b>	<b>Controller</b>	Intel® HD Graphics Gen9LP Series	
	<b>Feature</b>	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC HW Encode: AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC	
	<b>Display</b>	1 x DDI (HDMI/DVI/DP++) 1 x eDP	HDMI: resolution up to 3840x2160 @ 30 Hz DP++: resolution up to 4096x2160@60Hz eDP: resolution up to 3840x2160 @ 60Hz
	<b>Dual/Triple Display</b>	eDP + DDI (Dual)	
<b>EXPANSION</b>	<b>Interface</b>	4 x PCIe x1 (Gen 2) 1 x SDIO 1 x LPC 1 x I <sup>2</sup> C 1 x SMBus 1 x SPI 1 x UART (TX/RX)	
<b>AUDIO</b>	<b>Interface</b>	HD Audio	
<b>ETHERNET</b>	<b>Controller</b>	1 x Intel I211 / I210	
<b>I/O</b>	<b>USB</b>	1 x USB 3.1 + 8 x USB 2.0 / 2 x USB3.1 + 6 x USB 2.0	
	<b>SATA</b>	2 x SATA 3.0 (up to 6Gb/s)	
	<b>eMMC</b>	Supports up to 128GB eMMC, NC as default eMMC 5.1, BGA-153 Ball 8~128G(MLC mode)	
	<b>GPIO</b>	1 x 4-bit GPIO	
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	System Reset, Programmable via Software from 1 to 255 Seconds	
<b>SECURITY</b>	<b>FTPM</b>	Enables or Disables the BIOS support for the security device	
<b>POWER</b>	<b>Type</b>	5V, 5VSB, VCC_RTC	
	<b>Consumption</b>	Typical: x6212RE: 12V @ 0.98A (11.76W) Max.: x6212RE:12V @ 1.45A (17.4W)	
<b>OS SUPPORT (UEFI ONLY)</b>		Windows 10 IoT Enterprise 64-bit	Linux (Intel graphic driver available)
<b>ENVIRONMENT</b>	<b>Temperature</b>	Operating: 0 to 60°C -40 to 85°C -5 to 65°C(opt.)	Storage: -40 to 85°C
	<b>Humidity</b>	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	<b>MTBF</b>	773,944 hrs @ 25°C; 335,063 hrs @ 45°C; 138,841 hrs @ 60°C; 29,888 hrs @ 85°C	
<b>MECHANICAL</b>	<b>Dimensions</b>	Qseven form factor	70mm (2.76") x 70mm (2.76")
	<b>Compliance</b>	Qseven specification revision 2.1	
<b>CERTIFICATIONS</b>		CE, FCC Class B, RoHS	

## Ordering Information

Model Name	Part Number	CPU	Memory	eDP	USB 3.1	USB 2.0	eMMC	Operating Temp.
EHL700-TC83-6425RE	774-EHL7001-100G	x6425RE	8 GB	eDP	1	8	32GB	-40 to 85°C
EHL700-TC83-6414RE	774-EHL7001-200G	x6414RE	8 GB	eDP	1	8	32GB	-40 to 85°C
EHL700-BC43-6212RE	774-EHL7001-300G	x6212RE	4 GB	eDP	1	8	32GB	0 to 60°C

## Packing List

- 1 EHL700 board
- 1 Heat sink

## Optional Items

- Qseven Carrier Board
- Heat spreader
- Bracket