

EHL700

Atom



Features

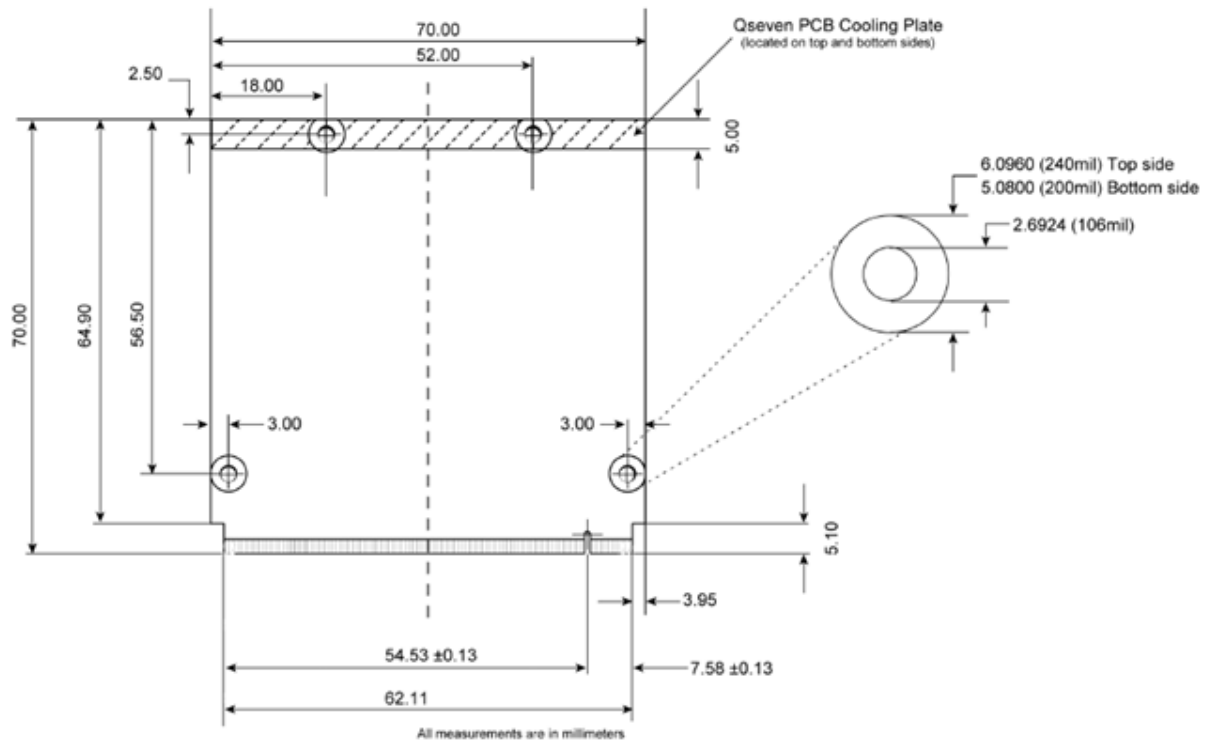
- 4GB/8GB LPDDR4 Single Channel Memory Down
- 1 DDI*, 1 LVDS*/eDP
- Supports dual displays: eDP+1DDI
- DP++ resolution supports up to 4096x2160 @ 60Hz
- Multiple expansions: 4 PCIe x1
- Rich I/O: 1 Intel GbE, 3 USB 3.1, 8 USB 2.0

* Populated by default



FC CE

Mechanical Drawing



Qseven Module Top Side

EHL700

► Specifications

SYSTEM	Processor	Intel® Celeron® Processor J6413 Intel Atom® x6000 Series Processors Intel Pentium® N and J Series Processors Intel Celeron® N and J Series Processors	
	Memory	4GB/8GB LPDDR4 Memory Down Dual Channel LPDDR4 3200MHz	
	BIOS	AMI SPI 256Mbit (supports UEFI boot only)	
GRAPHICS	Controller	Intel® HD Graphics Gen9LP Series	
	Feature	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	
	Display	1 x DDI (HDMI/DVI/DP++) 1 x LVDS/eDP	LVDS: NXP PTN3460, 24-bit, dual channel, resolution up to 1920x1200 @ 60Hz HDMI: resolution up to 3840x2160 @ 30 Hz DP++: resolution up to 4096x2160@60Hz eDP: resolution up to 3840x2160 @ 60Hz
	Dual/Triple Display	eDP + DDI (Dual)	
EXPANSION	Interface	4 x PCIe x1 (Gen 2) 1 x SDIO 1 x LPC 1 x I ² C 1 x SMBus 1 x SPI 1 x UART (TX/RX)	
AUDIO	Interface	HD Audio	
ETHERNET	Controller	1 x Intel® I211AT (10/100/1000Mbps) (0~60°C) 1 x Intel® I210IT (10/100/1000Mbps) (-40 to 85°C)	
I/O	USB	1 x USB 3.1 + 8 x USB 2.0 / 3 x USB 3.1 + 4 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	
	eMMC	Supports up to 128GB eMMC, NC as default eMMC 5.1, BGA-153 Ball 8~128G(MLC mode)	
	GPIO	1 x 4-bit GPIO	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	FTPM	Enables or Disables the BIOS support for the security device	
POWER	Type	5V, 5VSB, VCC_RTC	
	Consumption	TBD	
OS SUPPORT (UEFI ONLY)		Windows 10 IoT Enterprise 64-bit	Linux (Intel graphic driver available)
ENVIRONMENT	Temperature	Operating: 0 to 60°C -40 to 85°C -5 to 65°C(opt.)	Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	MTBF	TBD	
MECHANICAL	Dimensions	Qseven form factor	70mm (2.76") x 70mm (2.76")
	Compliance	Qseven specification revision 2.1	
CERTIFICATIONS		CE, FCC Class B	

► Ordering Information

Model Name	CPU	Part Number	Memory	LVDS/eDP	USB Port	eMMC	Operating Temp.
EHL700-TC83-6425RE	x6425RE	774-EHL7001-100G	8 GB	eDP	3.1 x1 / 2.0 x8	32GB	-40-85C
EHL700-TC83-6414RE	x6414RE	774-EHL7001-200G	8 GB	eDP	3.1 x1 / 2.0 x8	32GB	-40-85C
EHL700-BC43-6212RE	X6212RE	774-EHL7001-300G	4 GB	eDP	3.1 x1 / 2.0 x8	32GB	0-60C

► Packing List

- 1 EHL700 board
- 1 Heat sink

► Optional Items

- Qseven Carrier Board
- Heat spreader
- Bracket