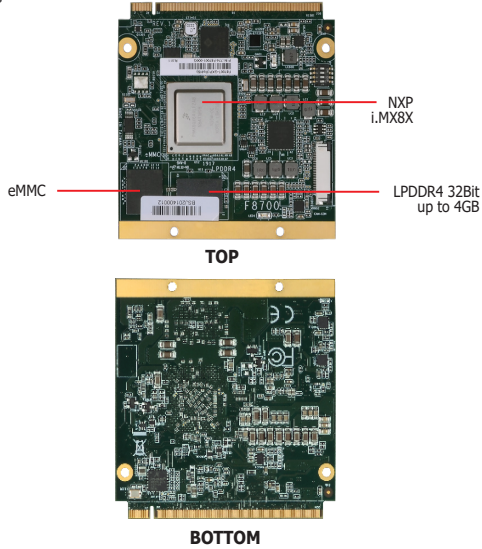




**NXP i.MX8X Series
Qseven**

F8700

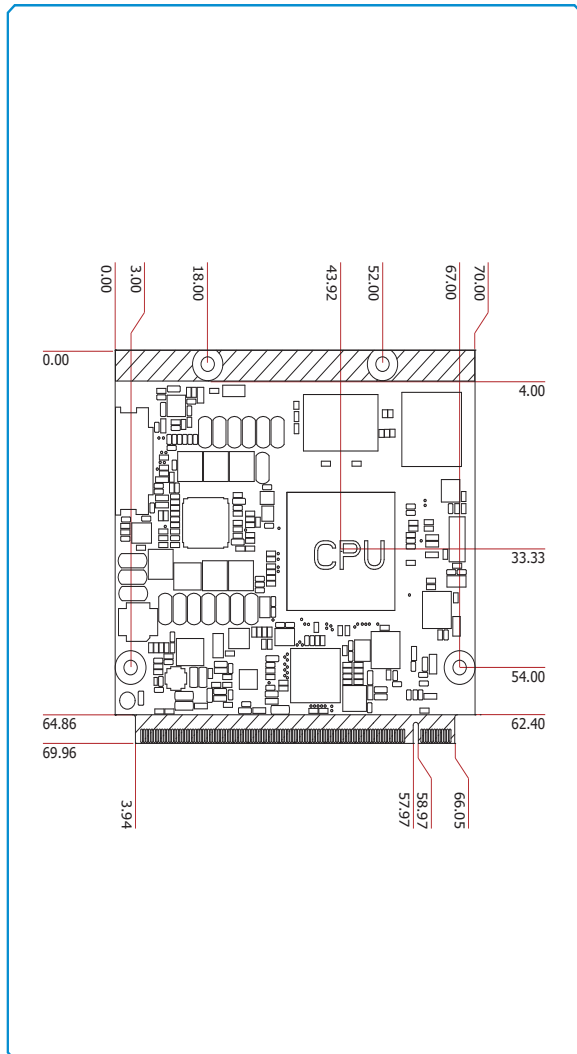


Features

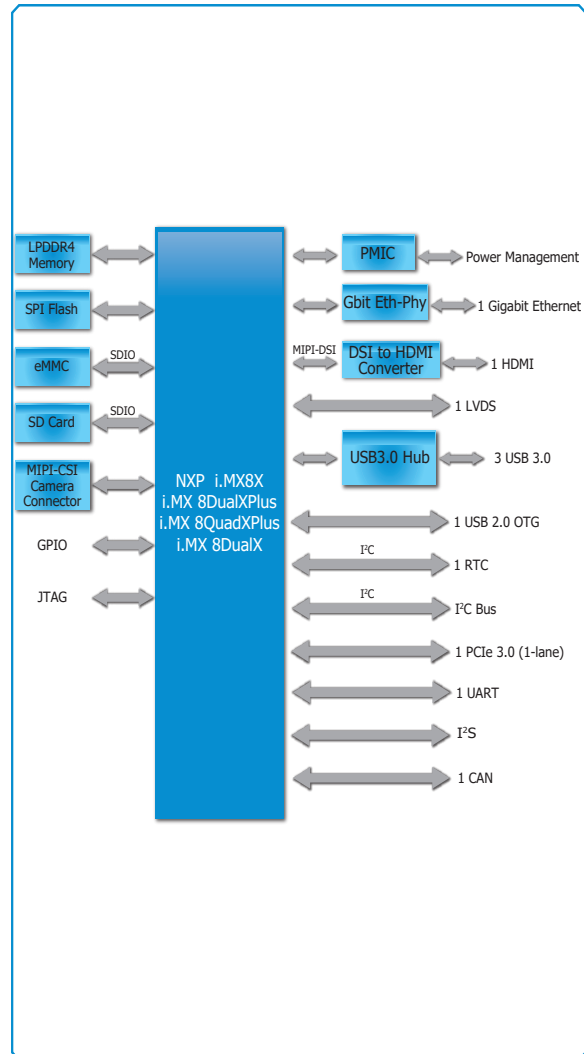
- 4GB LPDDR4 Memory Down
- Supports dual displays: 1 HDMI, 1 LVDS
- Multiple expansions: 1 PCIe x1, 1 SDIO x4 bit
- Rich I/O: 1 GbE, 3 USB 3.0, 1 USB 2.0 OTG



Mechanical Drawing



Block Diagram





Specifications

SYSTEM	Processor	NXP i.MX8X series processors i.MX 8DualXPlus: 2 X Cortex-A35 (1.2GHz) i.MX 8QuadXPlus: 4 X Cortex-A35 (1.2GHz) i.MX 8DualX: 2 X Cortex-A35 (1.2GHz)	
	Memory	LPDDR4 32Bit up to 4GB	Single Channel LPDDR4 3200MHz
GRAPHICS	Controller	GPU (graphics processing): 1 x GC7000Lite with 4x Vec4 shader cores (16 execution units)	
	Display	1 x HDMI 1 x LVDS	HDMI: HDMI v1.4, resolution up to 1920x1200 @ 60Hz LVDS: 1 Single Channel 18/24 bit up to 85 Mpixel/sec
	Dual Display	HDMI + LVDS (Extended desktop)	
STORAGE	eMMC	1 x 4GB/8GB/16GB eMMC	
EXPANSION	Interface	1 x PCIe x1 1 x 4-bit SDIO 2 x I ² C 1 x UART (TX/RX)	
AUDIO	Interface	1 x SAI	
ETHERNET	Controller	1 x Ethernet PHY (10/100/1000Mbps)	
I/O	USB	3 x USB 3.0 1 x USB 2.0 OTG	
	CAN Bus	1 x CAN Bus	
WATCHDOG TIMER	Output & Interval	Software programmable	
POWER	Type	5V	
	Consumption	Under 5W @ 5V	
OS SUPPORT		Yocto 2.5 - Kernel 4.14.78	
ENVIRONMENT	Temperature	Operating: -40 to 85°C	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	

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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