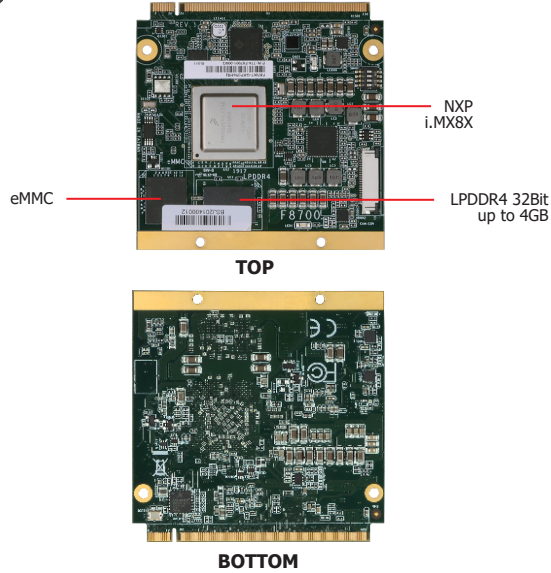


# F8700

ARM

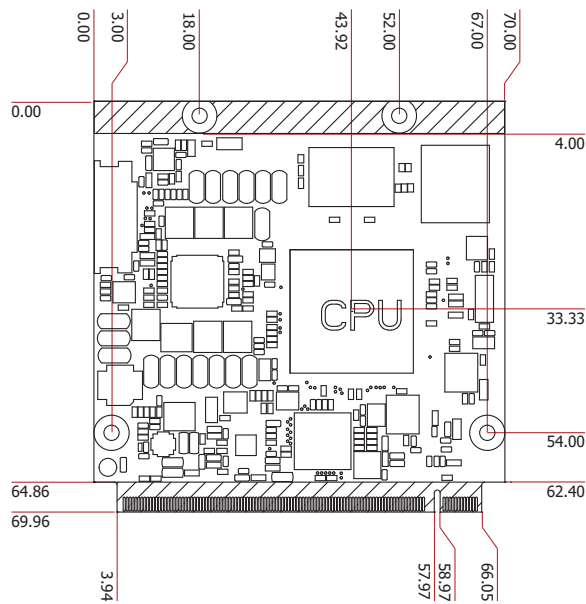


## Features

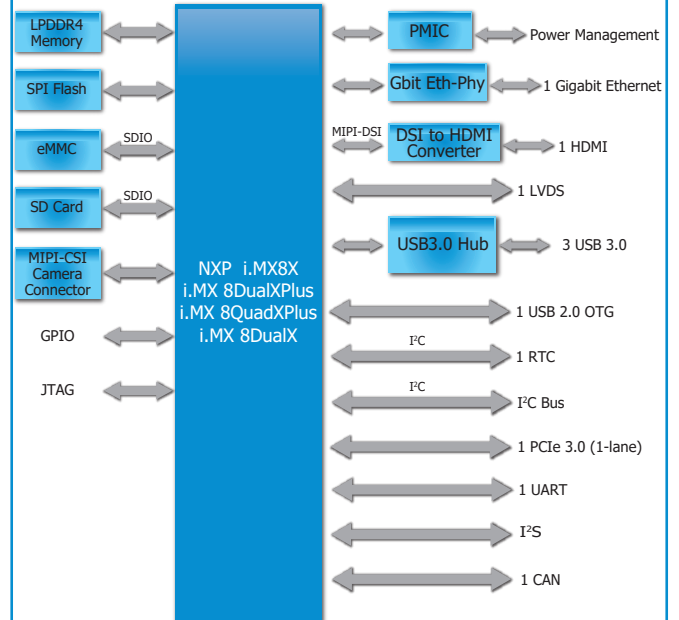
- 4GB LPDDR4 Memory Down
- Supports dual displays: 1 HDMI, 1 LVDS
- Multiple expansions: 1 PCIe x1, 1 SDIO x4 bit
- Rich I/O: 1 GbE, 3 USB 3.0, 1 USB 2.0 OTG



## Mechanical Drawing



## Block Diagram



## ► Specifications

<b>SYSTEM</b>	<b>Processor</b>	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)	
	<b>Memory</b>	LPDDR4 32Bit up to 4GB	Single Channel LPDDR4 3200MHz
<b>GRAPHICS</b>	<b>Controller</b>	GPU (graphics processing): 1 x GC7000Lite with 4x Vec4 shader cores (16 execution units)	
	<b>Display</b>	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
	<b>Dual Display</b>	HDMI + LVDS (Extended desktop)	
<b>STORAGE</b>	<b>eMMC</b>	1 x 4GB/8GB/16GB eMMC	
<b>EXPANSION</b>	<b>Interface</b>	1 x PCIe x1 1 x 4-bit SDIO 2 x I <sup>2</sup> C 1 x UART (TX/RX)	
<b>AUDIO</b>	<b>Interface</b>	1 x SAI	
<b>ETHERNET</b>	<b>Controller</b>	1 x Ethernet PHY (10/100/1000Mbps)	
<b>I/O</b>	<b>USB</b>	3 x USB 3.0 1 x USB 2.0 OTG	
	<b>CAN Bus</b>	1 x CAN Bus	
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	Software programmable	
<b>POWER</b>	<b>Type</b>	5V	
	<b>Consumption</b>	Under 5W @ 5V	
<b>OS SUPPORT</b>		Yocto 2.5 - Kernel 4.14.78	
<b>ENVIRONMENT</b>	<b>Temperature</b>	Operating: 0 to 60°C -20 to 70°C	Storage: -30 to 80°C
	<b>Humidity</b>	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	<b>MTBF</b>	TBD	
<b>MECHANICAL</b>	<b>Dimensions</b>	Qseven form factor	70mm (2.76") x 70mm (2.76")
	<b>Compliance</b>	Qseven specification revision 2.1	