# AP700

**Snap-dragon**



DDR3L

Intel Atom®
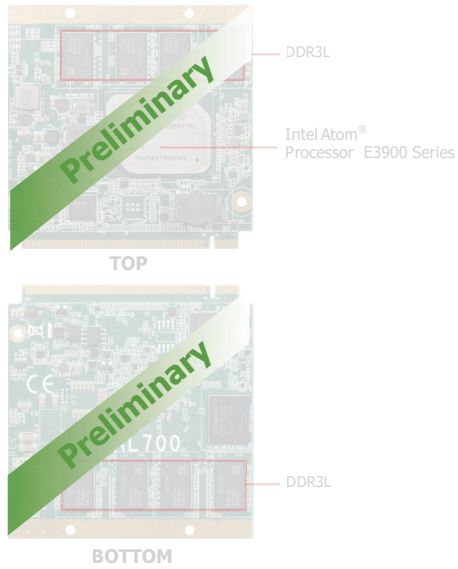Processor E3900 Series
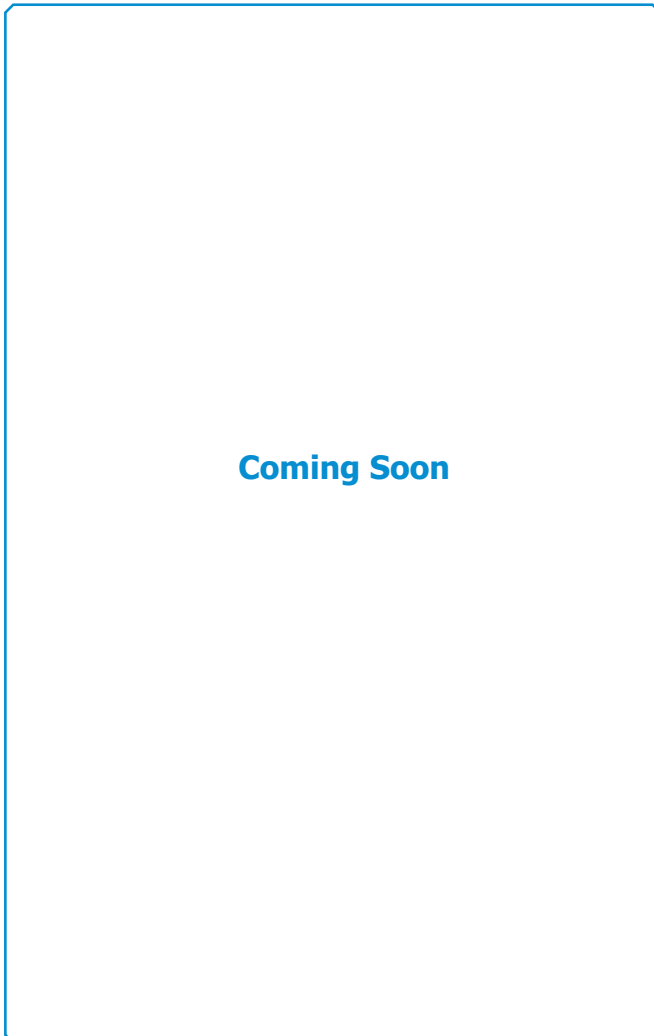
**TOP**

DDR3L

**BOTTOM**

▶ **Features**

- 3GB/6GB LPDDR4 Memory Down
- 1 HDMI, 1 LVDS
  Supports dual displays: HDMI+LVDS
- HDMI 2.0 resolution supports up to 3840x2400 @ 60Hz
- Multiple expansions: 1 PCIe x1
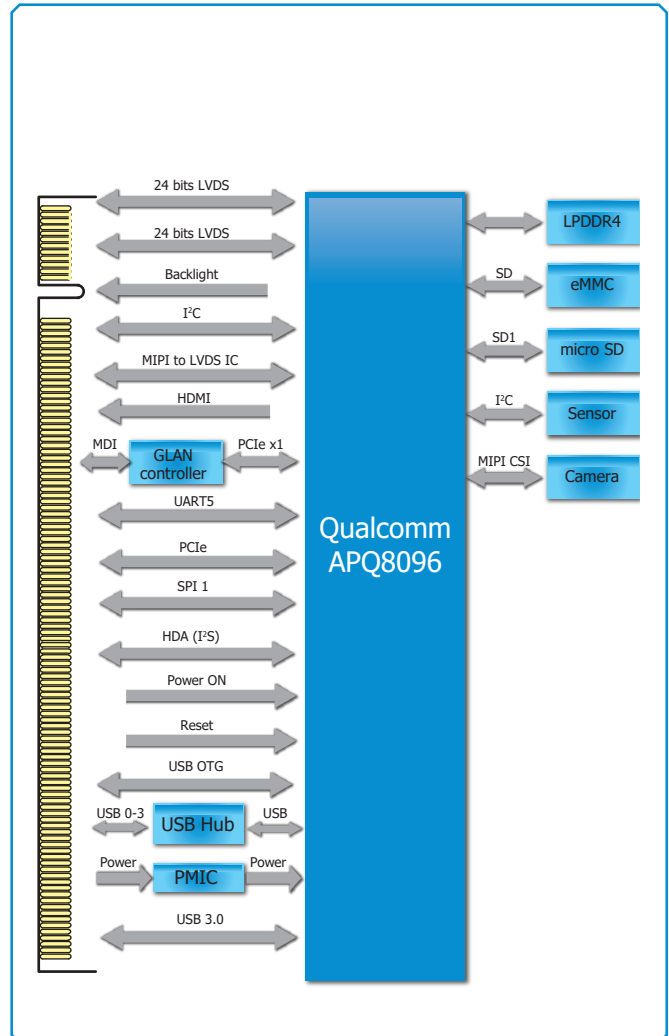- Rich I/O: 1 Intel GbE, 7 USB 3.0, 3 USB 2.0, 1 USB OTG

\* Populated by default

LPDDR4　SATA 3.0　USB 3.0　eMMC　SD/MMC

FC　CE　RoHS

▶ **Mechanical Drawing**

**Coming Soon**

▶ **Block Diagram**



24 bits LVDS
24 bits LVDS
Backlight
I²C
MIPI to LVDS IC
HDMI
MDI　GLAN controller　PCIe x1
UART5
PCIe
SPI 1
HDA (I²S)
Power ON
Reset
USB OTG
USB 0-3　USB Hub　USB
Power　PMIC　Power
USB 3.0

LPDDR4
SD　eMMC
SD1　micro SD
I²C　Sensor
MIPI CSI　Camera

Qualcomm APQ8096

**DFI®**

# AP700

## ▶ Specifications

| SYSTEM | Processor | Qualcomm® Snapdragon™ 820 Processor (APQ8096) 64-bit ARMr8-compliant Quad core applications processor (kyro) | |
|---|---|---|---|
| | Memory | 3GB/6GB LPDDR4 Memory Down | |
| GRAPHICS | Controller | TBD | |
| | Display | 1 x HDMI 2.0<br>1 x LVDS | HDMI 2.0: resolution up to 3840x2400 @ 60 Hz<br>LVDS: 18/24-bit, dual channel, resolution up to 2560x1600 @ 60Hz |
| | Dual Display | LVDS + HDMI | |
| EXPANSION | Interface | 1 x PCIe x1<br>1 x SATA<br>1 x I²C<br>1 x SDIO<br>1 x UARTC<br>1 x CCI | |
| AUDIO | Interface | HD Audio | |
| ETHERNET | Controller | 1 x Atheros AR8151 (10/100/1000Mbps) | |
| I/O | USB | 7 x USB 3.0<br>3 x USB 2.0<br>1 x USB OTG (Type B) interface | |
| | eMMC | Supports up to 16GB eMMC onboard | |
| | GPIO | 1 x 8-bit GPIO | |
| | Camera | 1 x MIPI-CSI | |
| WATCHDOG TIMER | Output & Interval | System Reset, Programmable via Software from 1 to 255 Seconds | |
| POWER | Type | 5V, 5VSB, VCC_RTC | |
| | Consumption | TBD | |
| OS SUPPORT | | TBD | |
| ENVIRONMENT | Temperature | Operating: 0 to 60°C | Storage: -30 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 | |