

SoM-5728

AM5728 Dual Core ARM Cortex A15 1.5 GHz



Features

- AM5728/29 Dual Core ARM Cortex A15 1.5 GHz
- 2x Cortex M4 RT Cores
- Up to 64GB of eMMC Flash
- HDMI & LVDS LCD Video with Resistive Touch
- 1x RT 1000 BaseT Ethernet & 2x PRU 100 BaseT
- 2x USB 3.0 Super Speed Dual - Role Device
- 1x USB 2.0 Host, 1x USB 2.0 Dual - Role Device
- 2x PCIe Channels

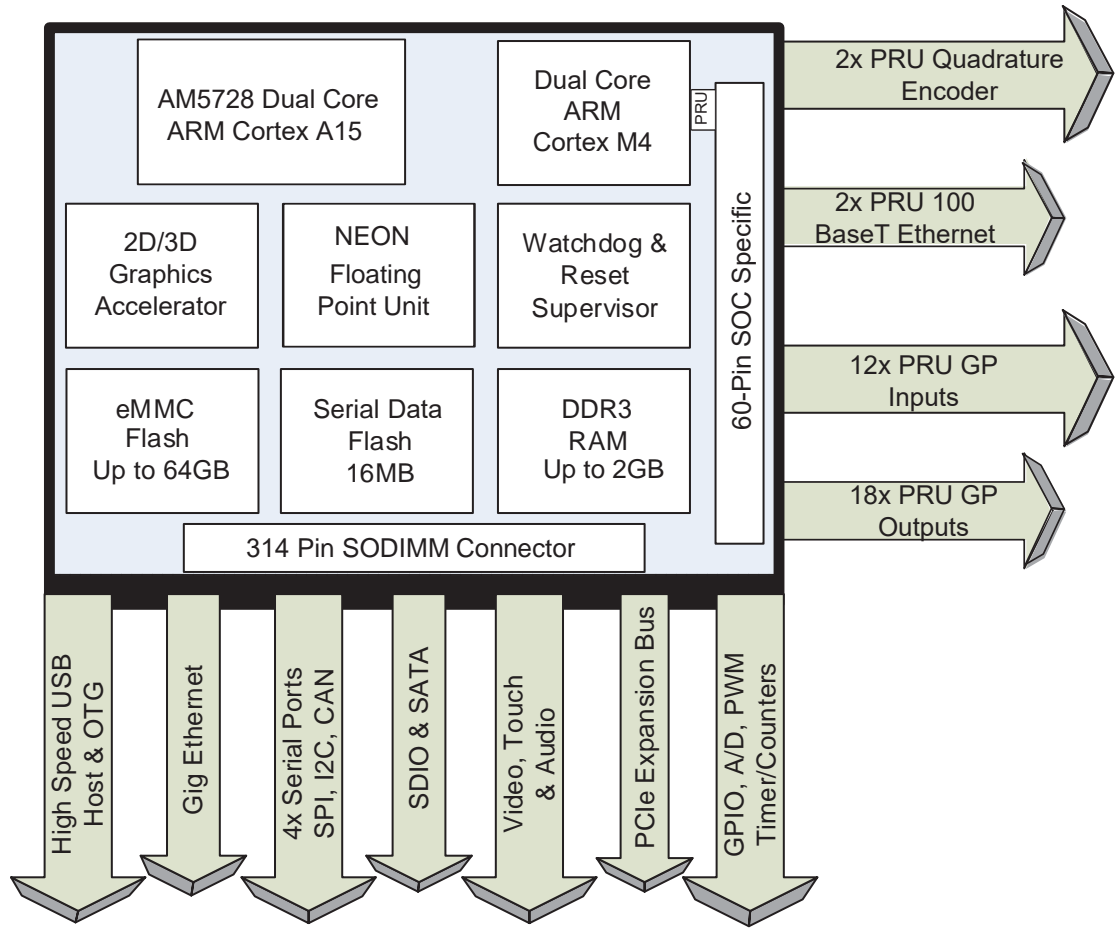


Specifications

Processor	AM5728 or AM5729 Dual Core ARM Cortex A15 with Dual Cortex M4 CoProcessors 1.5GHz A15 Cores & 213MHz M4 Cores
Memory	1GB of DDR3 RAM with up to 2GB optional 8GB of eMMC Flash with up to 64GB optional 16MB of Serial Data Flash
I/O	16x GPIOs & 12x PRU GP Inputs / 18x PRU GP Outputs 2x SDIO Ports 2x I2S Port 2x CAN Port 1x RT 1000 BaseT Ethernet & 2x PRU 100 BaseT 2x USB 3.0 Super Speed Dual - Role Device 1x USB 2.0 Host 1x USB 2.0 Dual - Role Device 4x Serial UARTs 2x SPI 2x Programmable Timer/Counter Ports & 3x PWM Ports & 2x quadrature Encoder Ports 2x I2C Ports
Analog	4x 12-bit A/D Channels & 4-wire Resistive Touchscreen Controller
Video	1x HDMI Video with I2C 1x LVDS 18-bit video with I2C
Bus Expansion	2x PCIe Ports & 1x SATA Port
OS	Embedded EMAC OE Linux
Dimensions	Small 314 pin SODIMM form factor 3.22" x 2.36" (82mm x 60mm)
Power Req.	5V Input Voltage Typical Running Current Consumption TBD *
Environment	-40° to + 85° C Industrial Wide Temperature 90% Upper Operating Humidity*



Block Diagram



Ordering Information

Product #	CPU	Memory	Serial	GPIO	USB	Video	LAN	Temperature
SoM-5728-100	AM5728 Dual Core A15 & Dual Core M4	1GB DDR3 4GB eMMC 16MB Serial Flash	4x	16x	1x HS Host 1x HS OTG	1x HDMI Video 1x 18-Bit LVDS	1x 1000 BaseT 2x100 BaseT	-40° to +85° C
SoM-5728-120	AM5728 Dual Core A15 & Dual Core M4	2GB DDR3 16GB eMMC 16MB Serial Flash	4x	16x	1x HS Host 1x HS OTG	1x HDMI Video 1x 18-Bit LVDS	1x 1000 BaseT 2x100 BaseT	-40° to +85° C

Optional Accessories

PRODUCT #	DESCRIPTION
SOM-350ES	Standard Carrier Board 12-26V @ 12W
PER-PWR-00032	(110V @ 60Hz US)
CAB-85-001-1	CAN Cable (CBL COM 10P/DB9-F 6")

