Comparison of Athena SBC Generations

Feature	Athena II	Athena III	Athena IV
Processor	VIA Mark 533/800MHz	Intel Tunnel Creek E640T 1GHz / E680T 1.6GHz	COM Express type 10 Intel Bay Trail E3845 1.91GHz
RAM	256MB soldered	1GB soldered	4GB (soldered on COM)
Mass storage	IDE	USB flash disk up to 8GB	M.2 2230 SATA flash disk up to 128GB
Ethernet	10/100 port on 1x6 0.1" pin header	10/100/1000 port on 2x5 2mm pin header	10/100/1000 port on 2x6 0.1" pin header 2nd 10/100/1000 port on 2x5 2mm pin header
Serial ports	2 RS-232 from chipset, 2 RS-232/485 from 16C2850 UART	4 RS-232/422/485, BIOS configuration; 2 from super I/O, 2 from 16C2850 UART	4 RS-232/422/485, jumper configuration; from XR17V354 PCIe quad UART; 2 serial ports from XR16C2850 as an option
USB Ports	4x USB2.0 ports on 2x5 2.54 mm pitch pin headers	4x USB2.0 ports on 2x5 0.1" pitch pin headers & 1 port used for on-board USB flash disk	4x USB2.0 ports on 2x5 0.1" pitch pin headers & 1 USB3.0 port on 2x5 2mm pitch vertical connector
Audio	VT1612A Audio CODEC on 2x5 0.1" pin header	ALC262 Audio CODEC on 2x5 0.1" pin header	ALC262 Audio CODEC on 2x5 0.1" pin header
Display VGA	Processor output on 2x5 0.1" pin header	SDVO to VGA converter CH7317B available on 2x5 0.1" pin header	DDI to VGA converterCH7517 available on 2x5 0.1" pin header
Display LVDS	Single channel, provided by processor available on 2x15 header	Single channel, provided by processor available on 2x15 header	Single channel, from COM module, available on 2x15 header
Parallel port	1 from chipset	1 from super I/O	NA
PS/2	From chipset	From super I/O	NA
CD	Analog CD input	NA	NA
ISA bus	Direct from processor	From F85226 LPC to ISA bridge	From LPC to ISA core within Artix 7 FPGA