

Atom motherboards for plan9 Aug 2009

The Intel Atom appears to be a good choice for a small plan9 system, and several motherboards have been successfully used.

Motherboard	Jetway NC92-330-LF	SuperMicro X7SLA-H	Intel D945GCLF2	ASUS AT3GC-I
ethernet	RTL8111C x1	RTL8111C x2	RTL8111C x1	RTL8111C x1
MP tables	garbled	valid	garbled	?
south bridge	ich7	ich7r	ich7	ich7
pata	1	1	1	1
sata	2	4	2	2
RAM slots	DDR2 x1	DDR2 x2	DDR2 x1	DDR2 x1
PCI slots	1	1	1	1
PCIe slots	-	2	-	-
audio	RT ALC662	-	RT ALC662	VT 1705
USB	6	6	8	8
serial	1+1 header	1+1 header	1	1
parallel	1 header	-	1	1
size	mini-itx	flex-atx	mini-itx	mini-itx
graphics	GMA 950	GMA 950	GMA 950	GMA 950
video	-	-	optional S-video out	-
power	20pin	24pin	24pin + 4pin	24pin + 4pin
price	£86	£118	£66	£67

Notes.

The none of these boards can address more than 2Gb of RAM

The GMA960 is not a supported graphics device so the VESA BIOS must be used, currently this precludes multiprocessor operation as the VESA BIOS is not reenterant. Plan9 could be modified to remove the reenterency requirement.

The garbled MP tables will become a non-issue when ACPI for plan9 is released. In the meantime this can be worked around, see </n/contrib/miller/jetway-nc92-330/mp.c>.

Modern SATA can disks provide superb performance, I (Steve Simon) am using two 500Gb 7200rpm drives mirrored: **Samsung HE502IJ** and a **Western digital WD5002ABYS**. These are classed as *RAID* or *Enterprise* grade disks and as such should be more reliable than vanilla consumer disks.