AccessionIndex: TCD-SCSS-T.20121208.075

Accession Date: 8-Dec-2012

Accession By: Tom Kearney, Prof.Doug Leith Object name: Sun 4/50 SPARCstation IPX

Vintage: 1991

Synopsis: Two Sun model 47B desktop workstations.

## **Description:**

The Sun model 47B SPARCstation IPX [1] was introduced by Sun Microsystems in July 1991. It was designed to be an entry-level networked workstation.

It was based on the SUN4C architecture, enclosed in a lunchbox chassis. It used a 40MHz Fujitsu MB86903 or Weitek W8701 processor. Weitek provided an 80MHz after-market *SPARC POWERuP!* (2000A-080 GCD) processor which worked well in an IPX but required a ROM update to v2.9.

It had four 72-pin SIMM slots for 50-80ns fast page memory (*FPM*) with parity SIMMs, giving a maximum of 64MB memory. Slots could be filled individually, but paired memory modules decreased access times via bank interleaving, resulting in faster memory and overall system performance. Additional 32MB and 64MB SBUS above-board RAM expanders could be fitted using the 8-pin J101 header, which contained additional power and clock signals next to the DMA/Cache controller.

The SPARCstation IPX also included an on-board AMD Lance Ethernet chipset providing 10BaseT 10Mbps networking as standard and 10Base2 and 10Base5 via an AUI transceiver. The OpenBoot ROM was able to boot from network, using RARP and TFTP. Like all other SPARCstation systems, it held system information such as MAC address and serial number in NVRAM. If the battery on this chip died, then the system could not boot.

It included an internal 3.5-inch 50-pin single-ended fast-narrow SCSI drive and a floppy disk drive, and also supported external SCSI devices. It had a CG6 video framebuffer.

This Collection holds a number of Sun hardware items, including the pre-production SUN-1 Workstations.

Thanks to Tom Kearney and Prof.Doug Leith for donating these items.

The homepage for this catalog is at: <a href="https://www.scss.tcd.ie/SCSSTreasuresCatalog/">https://www.scss.tcd.ie/SCSSTreasuresCatalog/</a> Click 'Accession Index' (1st column listed) for related folder, or 'About' for further guidance. Some of the items below may be more properly part of other categories of this catalog, but are listed here for convenience.

Accession Index	Object with Identification
TCD-SCSS-T.20121208.075.01	Sun 4/50 SPARCstation IPX. Sun model 47B desktop
10D Bess 1.20121200.073.01	workstation donated by Tom Kearney. S/N: 600-2791-04
	213M1236. 1991.
TCD-SCSS-T.20121208.075.02	Sun 4/50 SPARCstation IPX. Sun model 47B desktop
100 5055 1.20121200.070	workstation donated by Prof.Doug Leith. S/N: 600-2886-0Z
	235M5076. 1991.
TCD-SCSS-T.20121208.074	Sun Sparc Classic. Sun Sparc Classic. S/N: 600-2951-01
	418M0732. c.1992.
TCD-SCSS-T.20141212.001	Sun Pre-production SUN-1 Workstations, c.1982, hardware:
	Seminal workstation developed by Stanford University, with
	first-generation 3Mbps Ethernet.
TCD-SCSS-T.20150112.004	Sun Sparkstation 1+. Sun Sparkstation 1+ (Sun 4/65). 25MHz
	LSI L64801 CPU, Weitek 3172 coprocessor, 64MB DRAM
	and a new SCSI controller, compared to the 20MHz CPU and
	Weitek 3170 of the Sparkstation 1 (Sun 4/60). Sparkstation 1
	& 1+ were known as 'pizzabox', and were based on design
	requirements from Andy Bechtolsheim. Plug-in card with 9-
	pin D-type I/O connector. Manufacturing date: 27-Jun-1991.
	Model: 147B, Service Code: 4/65, FCC ID: C-123/89, P/N:
	600-2540-02, S/N: 125F1435. c.1989.
TCD-SCSS-T.20150213.002	Sun Sparcstation 4. Sun Sparcstation 4, S/N: 600-3368-01
	526M2486. c.19xx.
TCD-SCSS-T.20150213.003	Sun Sparcstation 10. Sun Sparcstation 10, S/N: 600-2935-02
TOD GOOD T 201 50212 00 :	245M0314. c.19xx.
TCD-SCSS-T.20150213.004	Sun Sparcstation 4/65. Sun Sparcstation 4/65, Dated 27-Feb-
TOD GOOD T 20150212 005	1990, S/N: 600-2546-01 008F1144. c.19xx.
TCD-SCSS-T.20150213.005	Sun Sparcstation 5 Sun Sparcstation 5, S/N: 600-3903-03
TCD 0000 T 20121200 002	747A0093. c.19xx.
TCD-SCSS-T.20121208.093	Sun Ultra Enterprise 450, c.1997, hardware: Departmental
	system that used UPA packet-switched interconnect.

## **References:**

1. Wikipedia, *SPARCstation IPX*, see: <a href="https://en.wikipedia.org/wiki/SPARCstation\_IPX">https://en.wikipedia.org/wiki/SPARCstation\_IPX</a>
Last browsed to on 31-Oct-2024.



Figure 1: Sun Sparcstation IPX three-quarter view.



Figure 2: Sun Sparcstation IPX front view.



Figure 3: Sun Sparcstation IPX rear view.



Figure 4: Sun Sparcstation IPX, S/N: 600-2791-04 213M1236, left rear closeup.



Figure 5: Sun Sparcstation IPX, S/N: 600-2791-04 213M1236, right rear closeup.



Figure 6: Sun Sparcstation IPX, S/N: 600-2886-0Z 235M5076, rear closeup.



Figure 7: Sun Sparcstation IPX, S/N: 600-2886-0Z 235M5076, bottom view. "Model: 47B, Service Code: 4/50".