



System Fact Sheet

SYSTEM

Introduced: July 1993
Discontinued: October 1993
Gestalt ID: 60
Form Factor: Centris 610
Weight (lbs.): 14
Dimensions (inches): 3.4 H x 16.3 W x 15.6 D

Codename: Tempest
Oder Number: M1839LL/A
KB Article #:

POWER

Max. Watts: 86
Amps: 1.70
BTU Per Hour: 294.12
Voltage Range: 100-240
Freq'y Range (Hz): 50-60
Battery Type: 3.6V lithium
 Soft Power
 Monitor Power Outlet

PORTS

ADB: 1
Video: DB-15
Floppy: none
SCSI: DB-25
GeoPort Connectors: 1
Ethernet: AAUI-15
Microphone Port Type: PlainTalk

Printer **Speaker**
 Modem **Headphone**
 Airport **Remote Control**

Includes S-video and RCA ports for video in and out.

VIDEO

Built-in Display: none

		<i>Maximum Color Bit-depth¹ At:</i>								
		512	640	640	640	800	832	1024	1152	1280
VRAM Speed:	VRAM Needed:	x384	x400	x480	x870 ²	x600	x624	x768	x870	x1024
80 ns	built in	24	24	16	8	16	16	8	8	n/a

Video Configuration: 1MB VRAM

¹ 1-bit = Black & White; 2-bit = 4 colors; 4-bit = 16 colors; 8-bit = 256 colors; 16-bit = Thousands; 24-bit = Millions
² The maximum color depth listed for 640x870 is 8-bit, reflecting the capabilities of the Apple 15" Portrait Display.

LOGICBOARD

Main Processor: 68040, 25MHz
PMMU: integrated
FPU: integrated
Data Path: 32-bit, 25 MHz
L1 Cache: 8K
L2 Cache: none
Secondary Processor: AT&T 3210 DSP, 55 MHz
Slots: one 7" NuBus or PDS

MEMORY

Memory on Logic Board: 4 MB
Minimum RAM: 4 MB
Maximum RAM: 68 MB
RAM Slots: 2 72-pin
Minimum RAM Speed: 70 ns
RAM Sizes: 4, 8, 16, 32 MB
Install in Groups of: 1

SOFTWARE

Speech Recognition Supported

Addressing Modes: 32-bit
Original SSW: 7.1
Original Enabler: System Enabler 088 v1.0

ROM ID: \$077D
ROM Version: \$10
ROM Size: 2MB
AppleTalk Version: 57.0.5

Supported Macintosh System Software:

<input type="checkbox"/> A/UX 1.0	<input type="checkbox"/> NOS 1.11	<input type="checkbox"/> ProDOS	<input type="checkbox"/>
<input type="checkbox"/> A/UX 1.11	<input type="checkbox"/> NOS 1.3	<input type="checkbox"/> GS/OS	<input type="checkbox"/>
<input type="checkbox"/> A/UX 2.0	<input type="checkbox"/> NOS 2.0	<input type="checkbox"/> NeXTStep 1.x	<input type="checkbox"/>
<input type="checkbox"/> A/UX 3.0.1	<input type="checkbox"/> NOS 2.1	<input type="checkbox"/> NeXTStep 2.x	<input type="checkbox"/>
<input type="checkbox"/> A/UX 4.1.4	<input type="checkbox"/> LOS 7/7	<input type="checkbox"/> NeXTStep 3.x	<input type="checkbox"/>
<input type="checkbox"/> A/UX 4.1.4.1	<input type="checkbox"/> DOS 3.1	<input type="checkbox"/> OpenStep	<input type="checkbox"/>
<input type="checkbox"/> A/UX 4.1.5	<input type="checkbox"/> SOS 1.3	<input type="checkbox"/> <1.0	<input type="checkbox"/>

SOUND

Built-in Microphone

Microphone Port Type: PlainTalk
Sound In: stereo, 16-bit
Sound Out: stereo, 16-bit

STORAGE

Supports Internal CD-ROM

Floppy Size: 1.44MB
Floppy Inject: auto
Internal HD Size: 80-500MB
Internal HD Interface: SCSI
Original CD-ROM Speed: 2x

HISTORY

Originally announced as the Centris 660AV in July 1993, The Quadra 660AV got a name change in October, when Apple phased out the Centris name, and was one of the first Macs (along with the Quadra 840AV) to integrate audio-visual features into it's basic design. It came in a Centris 610-style low profile case, and was driven by a 25 MHz 68040 processor, with a 55 MHz AT&T 3210 Digital Signal Processor. The 660AV was also one of the first Macs to include Geoport serial port (the modem port), which could be used as a modem with a telecom adapter. The 660AV had s-video and composite video-in and out, and was originally priced at \$2300, making it Apple's first low priced AV option.