
Technical specifications

Processor	Model	Processor	Clock Speed
	T4500	Intel 486 SX	20 MHz

System memory	Memory type	Amount	Chip Access speed
	Standard RAM	4096 KBytes	(100 nanoseconds)
Memory expansion	up to 16,384 KBytes	(100 nanoseconds)	
BIOS Flash EPROM	128 KByte	(150 nanoseconds)	
Video RAM	512 KByte	(70 nanoseconds)	
Cache memory	8 KByte on the CPU chip		

Memory size	Standard Memory	4 MB
	No of expansion slots	1
	Expansion card sizes	4 MB, 8 MB, 16 MB*

Memory map	Address	Size	Usage
	00000000 - 0009FFFF	640	System working memory
000A0000 - 000BFFFF	128	Video RAM	
000C0000 - 000C7FFF	32	VGA BIOS ROM	
000C8000 - 000CFFFF	32	Backup RAM (Resume Mode)	
000F0000 - 000FFFFF	64	System BIOS ROM	
00100000 - 003FFFFF	3456	System extended memory	
00400000 - 013FFFFF	16384	Memory card 1	
FFFF0000 - FFFFFFFF	64	Shadow BIOS ROM	
000E0000 - 000E7FFF	32	HardRAM windows	

*16 MB cards are under development for release in the second half of 1993.

Floppy disk drive

Specification	High setting	Low setting
Media supported*	3.5 inch 2HD	3.5 inch 2DD
Storage capacity	1.44 MB	720 KB
Rotation	300 rpm	300 rpm
Transfer rate	500 Kbit per second	250 Kbit per second
Bytes per sector	512	512
Sectors per track	18	9 (8)

*Adjustment between diskette types is automatic.

Hard disk drive

Specification	80 MB Disk	120 MB disk
	T4500 only	T4500 and T4500C
Formatted capacity	At least 80 MB	At least 121 MB
Data transfer rate to buffer	6.5 MB/sec	6.5 MB/sec
Data transfer rate to media	15 MB/sec	15.3 MB/sec
Average seek time	15 m/sec	17 m/sec
Track-to-track seek time	3 m/sec	5 m/sec
Drive rotation	3,600 rpm	3,200 rpm
No. of disks	1	2
No of read/write heads	2	4
Coding	1 - 7 RLL	1 - 7 RLL
Bytes per sector	512	512
Sectors per track	56	55
Number of cylinders	1,501	1,155
Interleave	1:1	1:1
Interface	AT compatible task file	AT compatible task file

Screens

Specification	LCD Screen	TFT Colour Screen
Number of dots	640 x 480	640 x 480
Dot pitch	0.3 x 0.3 mm	0.27 x 0.27 mm
Display area	196 x 147.6 mm	160 x 211 mm
Contrast ratio	17:1 (max.)	60:1
Colours	–	512 colours
Grey scales	64	8 levels for each gun (RGB)
Line response time	17 ms	50 ms

Brightness

85 cd/m²

60 cd/m²

Physical Dimensions	Monochrome version	Colour version
	Size (W, D, H)	297 x 210 x 46 mm
	11.8" x 8.4" x 1.8"	11.8" x 8.4" x 2"
Weight	2.9 kg (6.4 lb)	3.1 kg (6.8 lb)

Environmental Conditions	Operating	Non-Operating
	Temperature	5° C to 35° C
Relative Humidity	20% to 80%	10% to 90%
	Non Condensing	Non Condensing
Altitude	-60 to 3,000 m *	-60 to 10,000 m
	(relative to sea level) (-200 to 10,000 feet) *	(-200 to 30,000 feet)
Shock	10 G	60 G
Vibration	0.5 G	1 G
Thermal Gradient	20° C/hour	20° C/hour

Battery Types	Main	Back-up	RTC
	NiCd (T4500)	NiH ₂	Vanadium Lithium
NiH ₂ (T4500C)	NiH ₂	Vanadium Lithium	
9.6 V x 2400mAH	1.2 V x 1100mAH	3.0V x 50 AH	
Backup: 1 week (Resume)	8 hours (Resume)	1 month (RTC)	

Battery life	Mode	T4500	T4500C
	Minimum life	3:40	2:30
	Maximum Life	4:44	3:35

AC Adaptor	Input voltage	100 - 240 v AC, self-adjusting
	Frequency	50 - 60 Hz
	Output voltage	15 V
	Output current	2.0 A max.
	Power dissipation	30 W max.

*Aeroplane cabin pressures simulate low altitudes, so flying higher causes no restrictions

Certification

UL 478	USA
IEC 950	International
NEMKO	Norway
DEMKO	Denmark
SEMKO	Sweden
SEV	Switzerland
SETI(EI)	Finland
VDE 0806	German/ EC
FCC Part 15 Class B	USA
CSA 220	Canada
VDE 0871 Level B	European market
DOC Class B	USA
