

# Altos 580 Series



The Altos 580 Series is a complete line of powerful 8 bit microcomputers. Designed for growth, the 580 Series can be expanded to support up to 3 user workstations and one printer. The multipurpose Altos 580 Series provide a complete business solution with support of industry standard operating systems and languages, full communications, and a range of software applications to meet every business need.



## General Description

The 580 series of products are comprised of three desktop multi user systems which will support from one to three users. The system provides an entry level diskette based system with additional models supporting 12 and 20 megabytes winchester disk for future expansion. The series consists of the following features:

- Eight bit Z80A microprocessor
- 192K Bytes of main memory with parity
- 5¼ inch winchester disk and floppy disk support
- Multi-user system with 4 serial RS-232 ports
- Parallel interface for controlling one high speed, line printer
- Self diagnostics at power up

## Features and Capability

### Microprocessor

The central processing unit is a Z80A 8 bit microprocessor which operates at 4 Mhz and address 192K bytes of memory in banks of 64K bytes. Each system allows for partitioned memory in order to prevent contention among users by allotted each user a block of 48K. Dedication of memory to individual users keeps one job from interfering with another.

## Integral Data Storage

All 580 Series systems provide minimum diskette capacities of 1 megabyte utilizing the 5¼ inch disk technology. Winchester hard disk are also provided in 12 and 20 megabyte capacities. The system disk controller also supports an additional 12 megabyte disk as a second drive. Since fast access to stored data is crucial for multi-user systems, each system utilizes direct memory access for optimization of disk speeds.

## Communications

The 580 Series supports asynchronous and synchronous protocols including 3270/3276 IBM Cluster Terminal Controller Emulation and 3780 IBM Bisynchronous Package

## Configurations

580-2	192K bytes of RAM 2 megabyte Diskette 4 Serial RS-232 Ports 1 Parallel Port MPM II Operating System
580-10	192K bytes RAM 1 megabyte Diskette 12 megabyte Winchester Disk 4 Serial RS-232 Ports 1 Parallel Port MPM II Operating System
580-20	192K bytes RAM 1 megabyte Diskette 20 megabyte Winchester Disk 4 Serial RS-232 Ports 1 Parallel Port MPM II Operating System

## Specifications

### Microprocessor

Model	Z80A
Technology	NMOS
Data word size	8-bit
Instruction word size	8-bit
Clock frequency	4 MHz

### RAM Memory

Capacity	192 KB
Cycle time	450 ns

### I/O Control

Type of interrupt system	Vectored
Serial RS-232C ports	4
Parallel port	1

### Floppy Storage 580-2 580-10/20

Number of drives	2	1
Physical size	5¼ inch	5¼ inch
Unformatted capacity	2 MB	1 MB
Density	Double	Double
Sides	4	2
Data transfer rate	250 Kb/sec	250 Kb/sec
Access time (average)	132 msec	132 msec

### Winchester Storage

Number of drives	1
Physical size	5¼ inch
Unformatted capacity	
580-10	12 MBytes (10 iMB Formatted)
580-20	19 MBytes (15 MB Formatted)
Data transfer rate	5 Mb/sec
Access time (average)	85 msec

### Operating System

MP/III™  
OASIS™

### Languages

BI 280™	Microsoft Cobol
CBasic™	R/M COBOL™
CBasic Compiler CB-80™	CIS Cobol™
Microsoft Basic™	Pascal MT+™
Microsoft Basic Compiler™	Microsoft Fortran™

### Optional Mass Storage Add-On

12 MB Winchester disk (unformatted)

### Physical Characteristics

Width	16⅞"
Height	6"
Depth	18"
Weight	25 pounds

### Environmental and Safety Standards

Meets FCC docket 20780 Class A requirements	
UL approved	
CSA approved	
Ambient Temperature range	15–32°C 50–90°F
Relative humidity (non-condensing)	20–80%
Power dissipation	200 watts

*OASIS is a trademark of Phase One Corp.*

*C Basic is a trademark of Digital Research, Inc.*

*RM/COBOL is a trademark of Ryan McFarland*

*MP/M, CP/M & C Basic Compiler CB-80 is a trademark of Digital Research, Inc.*

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