μ-COMP DDP-516 General Purpose I/C Digital Computer

Honeywell
INTRODUCTION

The \( \mu \)-COMP DDP-516 is a third generation general purpose digital computer — a natural product of 3C's complete digital systems capability ... a new computer system at once new in terms of speed, high-performance I/C hardware and reliability, yet with immediately deliverable field-proven software.

The DDP-516 customer receives a system backed by a dozen successful years in the digital electronics industry, by programming and maintenance courses conducted by 3C experts, by a continuous exchange of information and ideas as a member of our computer users' group and by the resources, integrity and continuing support of Honeywell.

BACKGROUND

\( \mu \)-PAC — 3C's standard I/C logic module line, used throughout the DDP-516, offers high reliability, low cost per logic function, and ease of maintenance.

\( \mu \)-STORE ICM-40 Core Memory — The heart of the DDP-516, this compact, high speed system has been field proven in a variety of installations including the DDP-124.

\( \mu \)-COMP DDP-124 — Introduced in 1965, the DDP-124 was the first truly I/C computer commercially available. The DDP-516 is a natural extension of the design, production and installation experience gained with the DDP-124.

DDP-116 — The extensive software package, developed in over 100 installations of the industry's first 16-bit compact, is compatible with the DDP-516. Result: 250 field-proven programs immediately deliverable.

HIGH PERFORMANCE HARDWARE

Fully parallel machine organization
0.96 \( \mu \)sec memory cycle
1.92 \( \mu \)sec add
4096-word memory, expandable to 32,768
16-bit word, two's complement arithmetic
Two full-word arithmetic registers
Hardware index register
Multi-level indirect addressing;
  pre-or post-indexing
Large sector size for maximum memory efficiency
Priority interrupt is standard
Power failure interrupt is standard
Movable control console
Front access for ease of maintenance
Simple command format;
  comprehensive instruction repertoire
Most instructions executed in 1.92 \( \mu \)secs or less
Commands include 3-way compare, increment memory and skip, interchange memory and accumulator.
Powerful set of shift commands; extensive skip-branch conditions.
Byte manipulation commands
Operates on normal housepower within 0° to 45°C temperature ranges
Dimensions: 24" x 24" x 38"; weight: 250 lbs.
Simplified operator control; comprehensive data display
Requires no air conditioning, sub-flooring, or other special installations.

**INPUT/OUTPUT**
Designed for real-time systems interface
Individually buffered I/O devices
Flexible priority scheme with program settable masks
Two cycle I/O commands select device, test status, and transfer data
No I/O hold-off
Available with either ASR-33 or ASR-35 I/O teletype units
0.96 μsec I/O word transfer

**OPTIONS**
Memory expandable to 32,768 words; 16,384 in standard cabinet
Memory lockout
Memory parity
Direct multiplex control option for economical time-shared I/O
Direct memory access option for mc I/O rates
Real-time clock
Hardware double-precision capability
5.28 μsec multiply
10.56 μsec divide
Full line of peripheral equipment

DDP-516 is ideal in real-time on-line systems applications. Quick response to external conditions, ability to process several inputs and outputs simultaneously, and service I/O requests in order of priority without hold conditions add up to unprecedented efficiency in a low cost computer.

Tell me more about the NEW 16-BIT I/C COMPUTER . . . μ-COMP DDP-516
☐ Send me your complete DDP-516 catalog which contains detailed documentation and specifications.
☐ Have your computer expert call me for an appointment.

Name_________________________Title_________________________
Company____________________________________________________
Address_____________________________________________________
City________________State_________Zip_________________________
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Please . . . what application do you have in mind for the DDP-516?
__________________________________________________________________________

Complete documentation and specification information is available for your evaluation. Simply return this card.
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