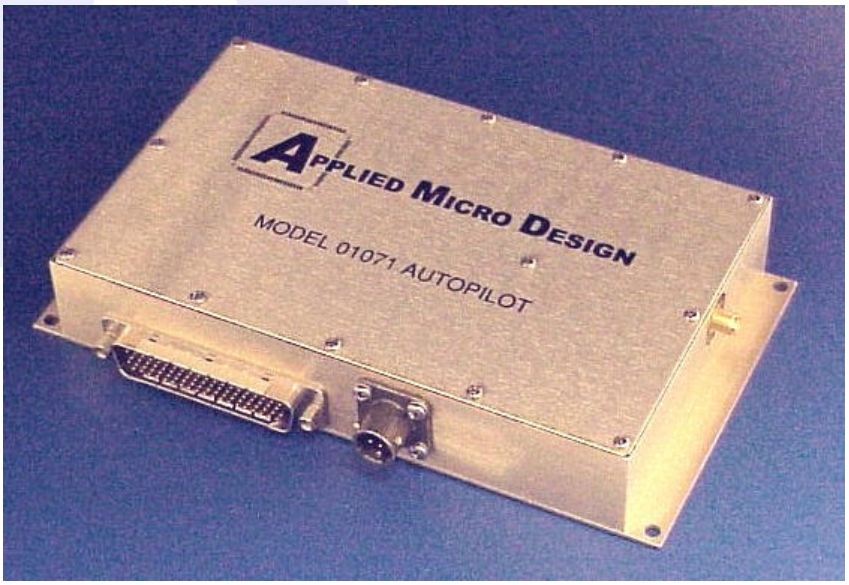
APPLIED MICRO DESIGN

AN ISO 9001:2000 COMPANY

UAV AUTOPILOT

MODEL 01071

- **32-bit Floating-point DSP**
- **Firmware Programmable Digital I/O**
- **Power-on Self Test**
- **Navigation Routines**
- **Internal GPS or INS**



The Model 1071 Autopilot was designed to autonomously control a UAV. It consists of a 32-bit Floating-point DSP processor control board, interface board, and GPS receiver or optional INS. This is the latest in a series of avionics packages that have evolved over a period of fifteen years, from designs based on 8-bit and 32-bit processors. These systems have controlled aircraft and payloads for applications including communications relays, a VHF jammer, a bio-sensor, dispensers for non-lethal devices, and day/night PTZ reconnaissance cameras.

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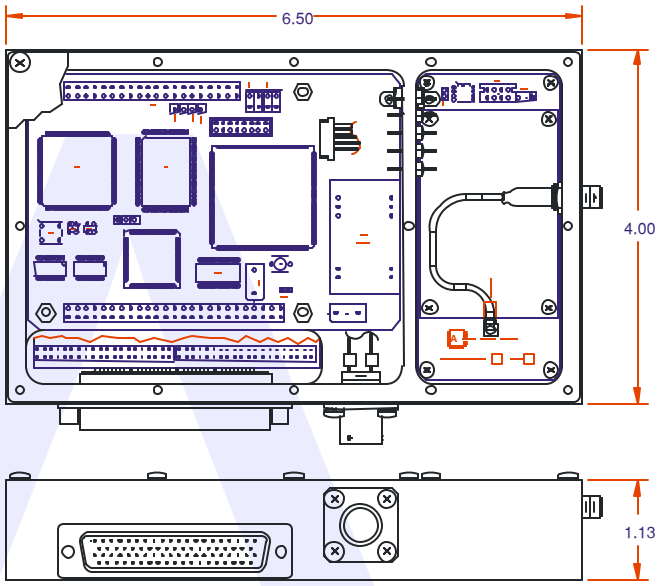

Hardware Specifications

32-bit Floating-point DSP
256K Words (32 bit) RAM
512K Bytes (8 bit) Flash
Eight RS-232/422 serial ports
8 channel (12-bits) A/D Converter
Firmware programmable digital I/O

System Features

Boot-loader for firmware upgrades
12 Pulse Width Modulation channels
Internal GPS receiver (INS optional)

Firmware Functions

Power-on self test
Peripheral initialization
Interrupt handlers
Real-time clock function
ADC sampling/scaling functions
UART interfaces
Stabilization Routines
Navigation Routines

System Specifications

Size: 6.5” X 4” X 1.25”
Weight: 2 pounds
Power: 12 volts or 24 volts

Applied Micro Design is an engineering company providing product and services to both government and private industry. Our staff has expertise in the hardware and firmware design of microprocessor-based systems, RF circuit design, analog and digital design, and computer applications programming. All work is done in house, at our ISO 9001:2000 registered facility.

We design, develop, and manufacture high performance, cost effective autopilots for small Unmanned Aerial Vehicles. We also provide a wide range of products, services and systems, including harnesses, radios for command and telemetry applications, low-noise amplifiers, and Ground Control Stations.

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