

ELLIOTT

920 AT Computer

Reliable

Versatile

Maintainable

Built in Test Features



Current Data

TYPE	General purpose airborne computer operating in the parallel mode.
SIZE	1 ATR short; including power supply.
WEIGHT	Approximately 32lb. (14 kg).
NUMBER REPRESENTATION	18 bit, fixed point, signed integer. Negative numbers as 2's complement.
INSTRUCTION FORMAT	Single address, 4-bit instruction code - 16 basic functions and many sub-functions.
SPEED OF OPERATION	Add 2.2 μ s. Multiply 9.0 μ s.
MEMORY	Random Access ferrite core. 16k words extendable to maximum of 65k. Cycle time 1 microsecond.
INTERRUPT	4 priority levels.
INPUT POWER	250VA at 115/200V, 400Hz or 28V D.C.
ENVIRONMENT	MIL 5400E Class 2X.
RELIABILITY	4000 hours MTBF.

Background

The 920AT computer is the latest in the well known Elliott 900 computer series. As such the 920AT has software compatibility with the 900 series thus allowing simulation and providing proven library backing facilities. The availability of a CORAL 66 compiler, permits easier programming and the reduction of programming time and cost. The built-in test features of the 920AT, used in conjunction with software routines, give 90% confidence of

fault detection.

Designed to meet the stringent digital system requirements of the next generation of military aircraft, the 920AT incorporates the experience gained in the design of the digital computing systems of the Nimrod Maritime Aircraft and the Jaguar Strike Aircraft. The input/output sections of the computer are designed with the predominant digital transmission systems of the future in mind.

System Applications

* CENTRALISED COMPUTER SYSTEM - Integration of system functions, with multiple processors providing failure survival operation if required.

* NAVIGATION - including inertial sensor control, precession calculations and optimal filtering.

* STEERING - calculation of steering signals to pilots display and autopilot.

* WEAPON AIMING - calculation of release point for a variety of stores and attack modes.

* DISPLAY - data formulation for Head-up, Head Down and Tabular displays.

Provisional Data. Customer options available to meet specific project requirement.

ELLIOTT

AIRBORNE COMPUTING DIVISION

ELLIOTT FLIGHT AUTOMATION LIMITED

Airport Works · Rochester · Kent · England

Telephone Medway(STD0634)44400

Telex 96333

A Member of Marconi-Elliott Avionic Systems Limited