



SYSTEMS S3000

INDUSTRIAL CONTROLLER

S3021: INTELLIGENT I/O BOARD (TIMING SIGNAL ADVANCE)

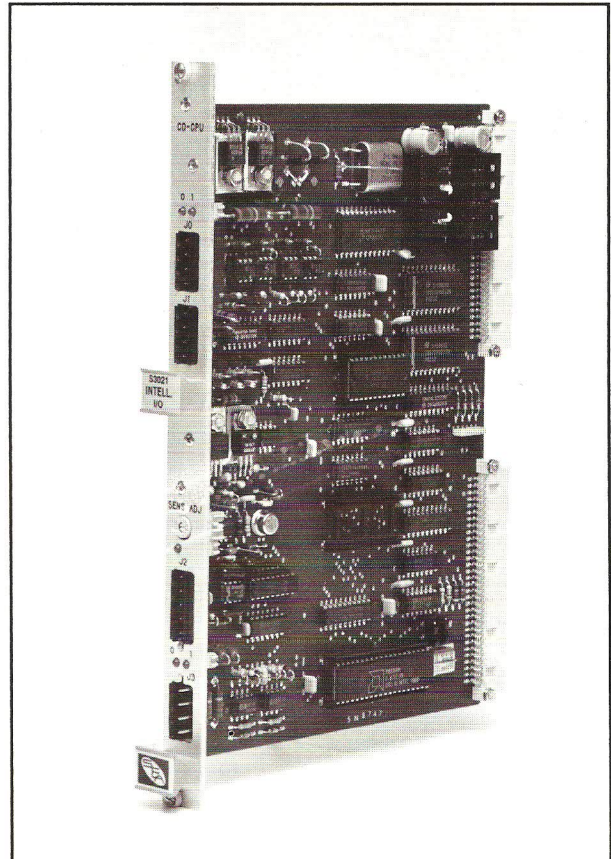
FEATURES:

- INTELLIGENT I/O BOARD WITH DIGITAL AND ANALOG INPUTS, DIGITAL OUTPUTS AND AN INTEL 8031 MICROCONTROLLER
- PROGRAMMED WITH SYSDEV51
- 8K BYTES PROGRAM MEMORY (EPROM)
- 128 BYTES RAM DATA MEMORY
- EXECUTES A USER APPLICATION PROGRAM INDEPENDENTLY OF MAIN PROCESSOR WHILE DRIVING APPLICATION SPECIFIC I/O
- DESIGNED FOR TIMING SIGNAL ADVANCE AS A FUNCTION OF MACHINE SPEED BUT CAN BE USED FOR OTHER APPLICATIONS
- 2 DIGITAL 15-30VDC DIFFERENTIAL INPUTS
- 2 DIGITAL 20-30VDC SOURCING OUTPUTS
- 1 - 8-BIT ANALOG INPUT (ANALOG TO DIGITAL)
- 3 FREQUENCY REFERENCE OUTPUTS
- INDIVIDUAL LED STATUS INDICATION FOR ALL DIGITAL INPUTS AND OUTPUTS

GENERAL DESCRIPTION:

The S3021 is an intelligent I/O board equipped with an Intel 8031 microcontroller and its own dedicated I/O. The S3021 is used as a CO-CPU board in S3000 systems where the S3021 is programmed to perform a specific task and interface directly with the I/O related to the task. This reduces the work load of the main processor, thus increasing the total system processing power and through-put.

Programming is implemented with SYSdev51, an IBM PC or compatible software package that allows



- REMOVABLE FIELD WIRING CONNECTORS FOR INPUTS AND OUTPUTS WIRING
- OPTICAL ISOLATION FOR DIGITAL INPUTS AND OUTPUTS

the user to create, compile, and program an EPROM for the S3021. This program is developed off-line and then programmed into an EPROM which is installed in the S3021. The S3021 program memory consists of 1ea. 2764 EPROM (8K bytes).

The S3021 was originally designed for timing advance as a function of machine speed applications but can be used for any applications requiring high speed digital or analog processing.

