CAMAC module

3520 12-Bit A/D Converter

PRODUCT BRIEF

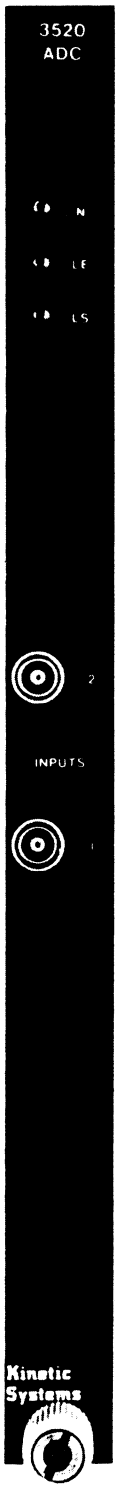
May 77
(Revised Jan. 80)

FEATURES

- 12-BIT SUCCESSIVE APPROXIMATION A/D CONVERTER
- UNIPOLAR AND BIPOLAR STRAP OPTIONS PROVIDED
- SINGLE AND DUAL CHANNEL OPTIONS AVAILABLE

APPLICATION

- GENERAL PURPOSE ANALOG SIGNAL MONITORING



GENERAL DESCRIPTION

The Model 3520 is a single-width CAMAC module for converting an analog signal into its binary equivalent. This unit is available with a single channel or a dual channel option.

Each input is single ended with an impedance greater than 100 megohms. The input voltage range is 0 to 10 volts, ±5 volts or ±10 volts, selectable by jumpers on the module. The converter has a 12-bit resolution with an accuracy better than ±½ LSB. The conversion time is less than 25 μsec. In the bipolar mode, the data is coded in 2's complement and the sign is extended to 24 bits. The inputs are through a LEMO connector (per channel) on the front panel as well as the P.C. edge connector at the rear of the module.

The LAM source for each converter is cleared at the beginning of a conversion and set at the end of the conversion. On the single channel version, only the 'Channel 1' commands are implemented.

FUNCTION CODES

Command		Q	Action
F(0)·A(0)	RD1	$\overline{BSY\,1}$	Reads the Channel 1 Data register.
F(0)·A(1)	RD1	$\overline{BSY\,2}$	Reads the Channel 2 Data register.
F(1)·A(15)	RD2	1	Reads the module identifying number (3520 = 6700_8).
F(2)·A(0)	RC1	$\overline{BSY\,1}$	Reads the Channel 1 Data register and initiates a new Channel 1 conversion.
F(2)·A(1)	RC1	$\overline{BSY\,2}$	Reads the Channel 2 Data register and initiates a new Channel 2 conversion.
F(8)·A(15)	TLM	LR	Tests if a LAM request is present.
F(24)·A(15)	DIS	1	Disables the LAM requests.
F(25)·A(0)	XEQ	$\overline{BSY\,1}$	Initiates a Channel 1 conversion if not busy.
F(25)·A(1)	XEQ	$\overline{BSY\,2}$	Initiates a Channel 2 conversion if not busy.
F(25)·A(2)	XEQ	$\overline{BSY\,1{\cdot}2}$	Initiates a conversion in both channels if neither is busy.
F(26)·A(15)	ENB	1	Enables the LAM requests.
F(27)·A(0)	TST	C1R	Tests the Channel 1 LAM source.
F(27)·A(1)	TST	C2R	Tests the Channel 2 LAM source.
Z	CZ	0	Disables the LAM requests.
Note: X = 1 for all valid addressed commands.			

KineticSystems
11 Maryknoll Drive • Lockport, Illinois 60441 • (815) 838 0005 • TWX 910 638 2831
6 Chemin de Tavernay • 1218 Geneva, Switzerland • (022) 98 44 45 • Telex 28 9622