26-Position Crate

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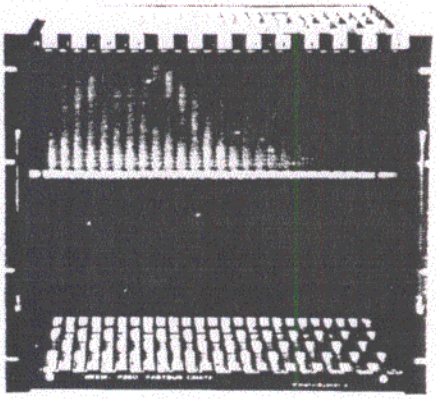
FEATURES

- Fully complies with FASTBUS specification for Type-A air-cooled crates
- Includes 26-position ECL segment backplane
- Auxiliary backplane option available
- Terminal lug high-current power supply connections
- Positive-action locking run/halt bar provided
- Molded module card guide assemblies arranged for maximum air flow
- Static discharge spring clips as an integral part of card guides



GENERAL DESCRIPTION

The Model F050 FASTBUS crate complies with the FASTBUS specification for a modular high-speed data acquisition system and conforms with the requirements of a Type-A forced-air-cooled crate. The crate is arranged to be mounted in standard 19-inch relay racks. The upper and lower module mounting guide assemblies are molded from high-strength plastic and are arranged to promote maximum air flow. Bronze copper spring clips form an integral part of the card guide to discharge a FASTBUS module to ground before contact is made with the segment backplane, protecting segment drivers from static damage.

The F050 crate is arranged for up to twenty-six single-width FASTBUS modules with a pitch of 16.51 millimeters (0.65 inches). These modules range in geographic address from slot 0 to 25, with slot 0 being the right-most module.

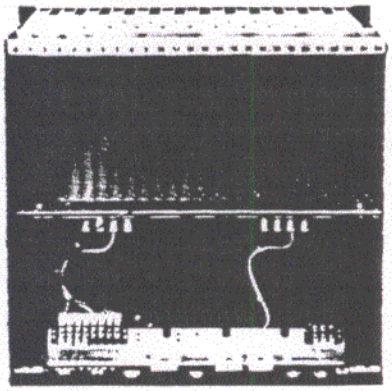
Access is provided on the rear of the Segment backplane for terminator cards and ancillary logic cards in positions 0, 1, 24, and 25. Rear card guides are provided for these backplane positions. The normal position for the Model F151 Geographic Address Controller (GAC) is slot 25, while the Model F152 Arbitration Timing Controller (ATC) is normally placed in slot 0. The F150 Terminator can be used in simple test configurations to replace the GAC or ATC.

The crate includes a Multilayer Segment backplane for power supply as well as bus communication between modules. This multilayer backplane contains twenty-six 130-pin pin-type connectors for mating with FASTBUS modules. Each connector includes a protective body and integral guide for accurate mating.

The Segment backplane consist of a 9-layer circuit board with the signal planes bussed on the outer layers with the power and ground planes located on the internal layers. The table below shows layer usage and copper thickness.

COPPER CLAD WEIGHT OF SEGMENT BACKPLANE

LAYER	THICKNESS		PLANE
1	2 oz.	.0028"	Signal
2	3 oz.	.0042"	GND
3	6 oz.	.0084"	−2.0V, −15V
4	6 oz.	.0084"	+5.0V, +28V
5	6 oz.	.0084"	−5.2V, +15V
6	3 oz.	.0042"	GND
7	2 oz.	.0028"	OVA +28V
8	3 oz.	.0042"	GND
9	2 oz.	.0028"	Signal



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GENERAL DESCRIPTION *(continued)*

The 195-contact auxiliary backplane option is provided for applications requiring rear I/O connections and is compatible with FASTBUS cards having 130 or 195 contacts. When the auxiliary backplane is provided, it covers card positions 0 to 25 and mounts above the Segment backplane. The connectors are completely independent, and no bus connections are provided on the auxiliary backplane. Each connector includes press-pin compliant pins that pass through the backplane. Connections are brought to the rear of the crate via cable cards with socket connectors. The FASTBUS crate includes card guides for these cable cards.

ORDERING INFORMATION

Weight: 20 kg. (44 lb.)

Model F050-A11 — FASTBUS 26-Position Crate w/o Auxiliary Backplane.
Model F050-A13 — FASTBUS 26-Position Crate w/F055-A02 195-pin Auxiliary Backplane.

Accessories (Order separately)

— Model F055-A02 Auxiliary Backplane w/195-pin Connectors (for F050-A11 Crate)
Model 5828-A15J for Model F051 Output Power Cable (3/0 welding) 1.5 meters
Model 5828-B15J for Model F051 Output Power Cable (2/0 welding) 1.5 meters
Model 5821-A15J for Model F051 Power Supply to Crate Voltage Sense Cable 1.5 meters
Model F020-A01 Module Extraction/Insertion Tool
Model F150-A01 Terminator
Model F151-A11 Geographic Address Controller
Model F152-A11 Arbitration Timing Controller
Model F210-A01 Active Extender
Model F211-A01 Passive Extender
Model F290-A01 Display Module