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Data Sheet

August 13, 2026

KONTRON / THALES / MATRIX

Kontron / Thales / Matrix MD-DAADIO8NFP Combination Board

Kontron / Thales / Matrix Data Acquisition Systems (DAQ). Resolution: 12-bit, Resolution: 12-bit per channel, Channels: Eight independent voltage outputs.

**MODEL****Kontron / Thales /
Matrix MD-
DAADIO8NFP****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****MD-DAADIO8NFP****LISTING**<https://aumictechlabs.com/products/md-daadio8nfp-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Kontron/Thales/Matrix MD-DAADIO8NFP is a 6U VMEbus combination board integrating analog and digital I/O on a single Eurocard for data acquisition and control applications. It consolidates 12-bit ADC and DAC converters with 48 TTL programmable I/O lines, eliminating the need for multiple boards while maintaining high performance and cost efficiency. Modular section population allows tailoring to specific mission requirements. Technical Specifications Analog-to-Digital Converter Resolution: 12-bit Conversion time: 12 μ s or 8 μ s Input configurations: 32 single-ended, 32 pseudo-differential, or 16 differential inputs Input ranges: Jumper-selectable 0-10V, $\pm$ 5V, $\pm$ 10V Maximum tolerable input: $\pm$ 35V Software-programmable gain: 1, 2, 4, 8, 16, 10, 20, 40, 80, 160 $\times$ (dynamic per-channel adjustment) Digital-to-Analog Converter Resolution: 12-bit per channel Output channels: Eight independent voltage outputs Output ranges: Jumper-selectable 0-

5V, 0-10V, ± 5 V, ± 10 V (independently configurable per channel) External reference input for non-standard scaling and multiplying D/A capability Optional voltage-to-current adapter available: 4-20 mA, 0-20 mA, 5-25 mA operation Programmable Input/Output I/O lines: 48 TTL lines across six individually configurable ports Interrupt capability: Port A provides eight lines configurable as interrupt sources with individual masking, pattern recognition, and change-of-state detection System Interface Bus standard: VMEbus Form factor: 6U double-height Eurocard Key Features Integrated D/A, A/D, and PIO functions reduce board count and system complexity Dynamic gain adjustment between channel samples optimizes input signal dynamic range Independently configurable output voltage ranges per DAC channel External reference support enables true multiplying D/A and custom voltage scaling Programmable interrupt configuration with pattern and state-change detection Typical Applications Data acquisition systems, real-time process control, signal conditioning, multi-channel analog monitoring, TTL-based digital control interfaces. Compatibility & Integration VMEbus systems requiring integrated analog/digital I/O on a single 6U board.

Features & description

From manufacturer datasheet

Features

- 12-bit ADC, 8 or 12 μ s, 32 SE / 16 DI, 0-10 V and $\pm$ 10 V

MDDAADIO8NFP Characteristics / Specifications

PARAMETER	VALUE
Model	MD-DAADIO8NFP
Manufacturer	Kontron / Thales / Matrix
Instrument Type	VMEbus Multifunction Analog and Digital I/O Board
Series	MD-DAADIO
Alias	MD-DAADIO8NFP; MD-DAADIO; DAADIO; Matrix MD-DAADIO8NFP
Bus	VMEbus
ADC Resolution	12 bit
Conversion Time	12 us or 8 us
AI Single Ended	32
AI Pseudo Differential	32
AI Differential	16
AI Ranges	0-10 V and +/-10 V jumper selectable (additional ranges on the jumper table)
AI Overvoltage	up to +/-35 V without damage
AI Gain	software programmable
DAC Resolution	12 bit
DAC Ranges	unipolar/bipolar and 5 V/10 V jumper class
VCA Loops	4-20 mA, 0-20 mA, 5-25 mA when VCA stuffed
PIO Lines	48
PIO Ports	6, each input or output
Interrupts	Port A 8 lines, maskable, pattern or edge class
Suffix 8NFP	factory stuffed option (channels/filters/packing); confirm jumpers vs the 8NFP build
Form	VME combination board
Power	VME backplane rails (confirm +5/+12/-12 current on the MD-DAADIO manual)
Documentation	Matrix/Kontron MD-DAADIO user manual

PARAMETER	VALUE
Status	vintage VME DAQ; Kontron/Thales/Matrix branding on different date codes
Identity	one-board analog+digital vs separate ADC and PIO cards Notes Specs from Kontron/Matrix MD-DAADIO family description used on MD-DAADIO8NFP listings (12-bit ADC 8/12 us, 32 SE/16 DI, +/-10 V, 48 PIO, VCA 4-20 mA). Confirm 8NFP stuffing and VME 3U vs 6U on the unit.

MDDAADIO8NFP Specifications

PARAMETER	VALUE
Applications	VME data acquisition; 12-bit analog in/out plus 48 DIO; 4-20 mA VCA loops; Kontron/Matrix MRO.
Key Features	- 12-bit ADC, 8 or 12 us, 32 SE / 16 DI, 0-10 V and +/-10 V
Technical Specifications	Model: MD-DAADIO8NFP

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Specifications

PARAMETER	VALUE
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Specifications

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Interrupts	Port A 8 lines, maskable, pattern or edge class
Suffix 8NFP	factory stuffed option (channels/filters/packing); confirm jumpers vs the 8NFP build

Specifications

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Form	VME combination board
Power	VME backplane rails (confirm +5/+12/-12 current on the MD-DAADIO manual)
Documentation	Matrix/Kontron MD-DAADIO user manual

Status: vintage VME DAQ; Kontron/Thales/Matrix branding on different date codes

Identity: one-board analog+digital vs separate ADC and PIO cards

Notes

Specs from Kontron/Matrix MD-DAADIO family description used on MD-DAADIO8NFP listings (12-bit ADC 8/12 us, 32 SE/16 DI, +/-10 V, 48 PIO, VCA 4-20 mA). Confirm 8NFP stuffing and VME 3U vs 6U on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.