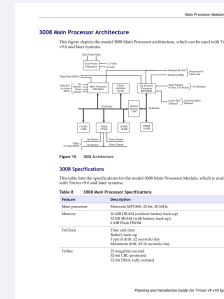


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Triconex 3008

TMR Main Processor Module



PROCESSOR

32-bit, 50 MHz

MEMORY

16 MB DRAM

TRIBUS

25 Mbit/s

SOURCE

9720077-012

Triconex 3008 is a main processor module for the Tricon v9.6-v10.x controller range documented in the manufacturer guide. Three main processors independently execute the control program and exchange voted data through TriBus.

01

VERIFIED PRODUCT PARAMETERS

Main processor	Motorola MPC860, 32-bit, 50 MHz
DRAM	16 MB, without battery backup
SRAM	32 KB, with battery backup
Flash PROM	6 MB
TriClock function	Time and date with battery backup
TriClock drift	Typical +/-2 seconds/day; maximum +/-2.16 seconds/day
TriBus transfer rate	25 megabits/second, per model 3008 Table 8
TriBus error protection	32-bit CRC
TriBus transfer mechanism	32-bit DMA, fully isolated
Diagnostic serial interface	Optically isolated RS-232; one 25-pin connector

Technical values were verified against Invensys 9700077-012, February 2009.

02 ADDITIONAL TECHNICAL DATA

Diagnostic serial isolation	500 VDC
Communication processor	Motorola MPC860, 32-bit, 50 MHz
Communication bus interface	RS-485, 2 megabits/second
I/O bus interface	RS-485, 375 kilobits/second
Logic power	10 W

03 SYSTEM ROLE AND APPLICATIONS

The exact-model specification identifies a 50 MHz Motorola MPC860, 16 MB DRAM, 32 KB battery-backed SRAM and 6 MB Flash PROM. Check the installed controller version, matching processor firmware and slot keys before planning an exchange; 3006 or 3007 identity alone does not establish interchangeability.

- Execute the configured control program independently in each of the three processor legs. The architecture compares program data between processors while each leg maintains its own I/O communication.
- Record configured Boolean state changes with timestamps in SOE buffers. Main processors work with communication modules; configure SOE blocks in TriStation and retrieve them through the appropriate recorder software.
- Use the documented TriBus path for interprocessor exchange, digital-input majority voting and control-variable comparison. The exact 3008 specification identifies CRC-protected, isolated DMA transfer.

04 OFFICIAL INSTALLATION FACTS

- Confirm 3008 identity and compatibility with the installed Tricon release.
- Verify processor firmware matches the other main processors.
- Check top slot key 007 and bottom slot key 002; never force insertion.
- Retain the validated application and configured retentive data records.

05 OFFICIAL DOCUMENTATION

Invensys 9700077-012, February 2009

AMIKON PRODUCT SUPPORT

Amikon Limited | INFO@AMIKON.CN