ABB PM5670-2ETH 1SAP151000R0278

Technical Reference and Engineering Data

PM5670-2ETH 1SAP151000R0278 is an AC500 processor module with 160 MB memory, two Ethernet interfaces, serial communication and CAN. The R0278 revision is the limited/classic hardware generation and must be paired with its approved terminal base and compatible firmware project.

01 Exact identity and system role

Complete model	PM5670-2ETH 1SAP151000R0278
Product type	AC500 Programmable Logic Controller CPU Module
Manufacturer	ABB
Technical source	ABB product record 1SAP151000R0278 and AC500 catalog 3ADR020077C0204 Rev F
Supply voltage	24 Vdc
Memory	160 MB
Minimum instruction time, bit	0.002 microseconds
Minimum instruction time, word	0.002 microseconds
Minimum instruction time, floating point	0.002 microseconds
Ethernet interfaces	2

System position

Preserve the TB56xx-2ETH base, 24 Vdc supply, both Ethernet assignments, serial/CAN wiring and the revision-2 application archive.

Lifecycle and installed-base context

Exact hardware phase	ABB identifies 1SAP151000R0278 revision 2 as Limited / Classic.
Published successor	ABB lists 1SAP151000R0378 revision 3 as the feature-compatible successor.
Migration condition	Revision 3 requires CPU firmware 3.6.0 or later; project and terminal-base compatibility must be checked before release.

Available unit details

Supply scope	One PM5670-2ETH R0278 processor module; TB56xx-2ETH base, memory media and field wiring are separate unless quoted.
Unit evidence	Request the complete 1SAP151000R0278 label, revision marking, connector condition and front-display photograph.
Configuration handover	Keep the application archive, firmware version, network addressing and I/O allocation with the unit record.

02 Verified technical data

Supply voltage	24 Vdc
Memory	160 MB
Minimum instruction time, bit	0.002 microseconds
Minimum instruction time, word	0.002 microseconds
Minimum instruction time, floating point	0.002 microseconds
Ethernet interfaces	2

Additional engineering data

Serial interface	RS-232/RS-485
CAN interface	Integrated
Required terminal base	TB56xx-2ETH
Published product weight	0.133 kg
Revision status	R0278 revision 2; Limited / Classic

Successor revision	1SAP151000R0378 revision 3

Applicability boundary

Exact R0278 order identity and ABB-published PM5670-2ETH revision-2 processor, interface and lifecycle fields.

03 Integration and engineering interpretation

AC500 machine control

Execute the retained IEC control application with the recorded task timing and I/O mapping.

Dual-Ethernet controller node

Restore the two port roles, IP addresses and protocol settings from the commissioned project.

Serial and CAN integration

Match the installed RS-232/RS-485 and CAN wiring, baud rate and protocol allocation.

Revision-2 maintenance

Use R0278 where the approved installation and firmware record require the revision-2 processor.

Technical notes

Revision control	Treat R0278 and R0378 as different hardware revisions even though ABB describes R0378 as feature-compatible.
Network record	Capture both MAC/IP roles and connected device names before exchange.
Acceptance record	Save firmware, project checksum, CPU status, task cycle and communication diagnostics.

Interpretation boundaries

Product boundary	Apply the listed facts to PM5670-2ETH 1SAP151000R0278 and the documented ABB AC500 PM56xx-2ETH CPU context only.
Interface boundary	Connector, terminal, bus, cable and companion-device assignments must match the installed drawing.
Electrical boundary	Use exact-model values only; system-level ratings remain conditional on the complete installed configuration.
Configuration boundary	Switches, jumpers, addresses, firmware and project settings must be reconciled before energization.
Diagnostic boundary	Interpret indicators and fault states together with measured inputs, outputs and host-system status.
Acceptance rule	Use the approved system baseline and maintenance procedure for the final as-left decision.

04 Diagnostic decisions and support record

What controller family contains PM5670-2ETH 1SAP151000R0278?	It is an ABB AC500 PM56xx-2ETH processor module.
How much memory is published for PM5670-2ETH 1SAP151000R0278?	ABB publishes 160 MB.
Which network interfaces are integrated in PM5670-2ETH 1SAP151000R0278?	Two Ethernet interfaces, RS-232/RS-485 and CAN are integrated.
Which terminal base is required for PM5670-2ETH 1SAP151000R0278?	Use the TB56xx-2ETH base identified for the PM56xx-2ETH hardware.
What lifecycle phase applies to PM5670-2ETH 1SAP151000R0278?	The R0278 revision-2 record is Limited / Classic.
What successor is listed for PM5670-2ETH 1SAP151000R0278?	ABB lists 1SAP151000R0378 revision 3 as feature-compatible, subject to firmware and project checks.
What must be backed up before replacing PM5670-2ETH 1SAP151000R0278?	Back up firmware, the application, retain data, network addresses and serial/CAN settings.
How should PM5670-2ETH 1SAP151000R0278 be accepted after installation?	Prove CPU state, task timing, both Ethernet links, serial/CAN communication and mapped I/O.

Verified source

ABB product record 1SAP151000R0278 and AC500 catalog 3ADR020077C0204 Rev F

Related product references

Related product	ABB ZINT-571 3AUA0000077333
Related product	ABB CI858K01 3BSE018135R1

Related product	ABB PM511V16 3BSE011181R1
Related product	ABB BCU-12 3AUA0000110430

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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Acceptance evidence package

Nameplate evidence	Overall and close photographs showing PM5670-2ETH 1SAP151000R0278, revision, approval and serial details where present.
Installation evidence	Views of the rack position, mechanical datum, terminal assignment, cable route and strain relief.
Configuration evidence	Export or screenshots identifying the approved hardware assignment and parameters without exposing credentials.
Baseline evidence	As-found readings with units, test conditions, machine state and the instrument used.
Inspection evidence	Connector, contact, insulation, fastener, contamination and heat-condition observations.
Functional evidence	As-left readings and the controlled input, output or channel response used for acceptance.
Change evidence	Any wiring, setting, firmware or mechanical change linked to its approved work reference.
Release evidence	Technician, reviewer, date, asset reference and the maintenance-record location for traceability.

Controlled acceptance sequence

01 AC500 machine control	Execute the retained IEC control application with the recorded task timing and I/O mapping.
02 Dual-Ethernet controller node	Restore the two port roles, IP addresses and protocol settings from the commissioned project.
03 Serial and CAN integration	Match the installed RS-232/RS-485 and CAN wiring, baud rate and protocol allocation.
04 Revision-2 maintenance	Use R0278 where the approved installation and firmware record require the revision-2 processor.

Evidence quality controls

Traceability	Each value is tied to PM5670-2ETH 1SAP151000R0278, the asset location, test state, instrument and date.
Repeatability	The same approved method and comparable operating state are used for before-and-after readings.
Resolution	Recorded precision does not exceed the capability of the instrument or source document.
Reference state	Stopped, energized, loaded and process-running observations are clearly distinguished.
Change control	Every changed setting, connection or mechanical datum has an approved reason and reviewer.
Retention	Evidence remains accessible with the maintenance record for future troubleshooting and replacement review.

As-left commissioning record

Exact delivered marking	PM5670-2ETH 1SAP151000R0278; photograph and record any additional label detail.
Installed asset reference	Machine, bearing, train, channel and drawing identifiers.
Mechanical as found	Reach, lock position, gap reference, cable route and connector support.
Static reading as found	Gap, bias, continuity or channel value appropriate to the installed system.
Companion identities	Extension cable, Proximitor or conditioner and monitor channel markings.
Mechanical as left	Final reach, lock position, target clearance and route protection.

Exact-model engineering notes

Revision control	Treat R0278 and R0378 as different hardware revisions even though ABB describes R0378 as feature-compatible.
Network record	Capture both MAC/IP roles and connected device names before exchange.
Acceptance record	Save firmware, project checksum, CPU status, task cycle and communication diagnostics.