

MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB PM511V08 3BSE011180R1

PM511V08 AC450 Processor Replacement Guide

ABB PM511V08 Advant Controller 450 Processor Module

DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

Product / lookup identity	ABB PM511V08 3BSE011180R1
Reference number	3BSE011180R1
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/pm511v08-3bse011180r1>
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Application, processor, I/O, and redundancy path

ABB PM511V08, product ID 3BSE011180R1, is a processor module used as the CPU-board element of an Advant Controller 450 process controller. In the AC450 system it executes the configured control application and coordinates controller resources, I/O exchange, and communication functions provided by the surrounding controller architecture.

01	Controller Role: Executes the AC450 control application and coordinates controller processing in the configured system.
02	Redundancy: ABB documents up to two PM511 CPU boards and permits dual redundancy at system level.
03	Process Signals: No direct analog or digital field channels are published for PM511V08. Process signals enter and leave through documented S100/S800 I/O modules and buses.
04	Communications: AC450 communication functions are provided through configured ABB interface modules such as the official CI/CS families. Do not assign any protocol as built into PM511V08 without exact processor documentation.
05	Memory And Storage: The exact official sources used here do not publish PM511V08 memory or storage details. Values associated with PM511V16 or third-party pages must not be copied.

AC450 architecture and Limited lifecycle boundaries

01	Verification Status: VERIFIED_EXACT_MODEL_AND_PRODUCT_ID_FROM_ABB_OFFICIAL_SPARE_PARTS_PUBLICATION; FUNCTION_BOUNDED_BY_AC450_OFFICIAL_SYSTEM_DATA
02	Exact Mapping: ABB's official final-sale spare-parts publication maps 3BSE011180R1 to PM511V08 and calls it a Processor Module. ABB's Advant Controller 450 product data identifies PM511 as the controller CPU board and allows up to two CPU boards for dual redundancy.
03	Lifecycle Status: The Advant Master AC450 product line entered Limited lifecycle phase effective 2025-07-01. ABB's 2023 final-sale publication listed exact 3BSE011180R1 as a new PM511V08 processor at that time, but the current exact-item manufacturing/supply status is not separately published and must be confirmed with ABB.

Revision, backup, ESD, active/standby, and restore checks

01	Verify PM511V08 and 3BSE011180R1 on the physical label, project bill of materials, and application backup before any work.
02	Do not substitute PM511V16, PM510V08, a coated/marine variant, or any refurbished/exchange code without an ABB-approved migration or exact compatibility record.
03	Confirm the installed AC450 software release, firmware/hardware revision, memory configuration, program card, and redundancy configuration before replacement.
04	Back up and verify the control application and all required configuration data under the site's approved change-management procedure.
05	Follow the AC450 shutdown, process-safe-state, lockout, regulator isolation, and absence-of-voltage procedure before removing the CPU board.
06	Use ESD-safe handling and protect edge connectors, components, and board guides from contamination, flexing, impact, or moisture.

Identity and release controls

Verification Status	VERIFIED_EXACT_MODEL_AND_PRODUCT_ID_FROM_ABB_OFFICIAL_SPARE_PARTS_PUBLICATION; FUNCTION_BOUNDED_BY_AC450_OFFICIAL_SYSTEM_DATA
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Official ABB sources

ABB Final Sale Savings on hard-to-find parts	https://library.e.abb.com/public/14121fe82fe648edb1d5beac65e80526/Act%20Now%20PDF.pdf
ABB Advant Controller 450 product data	https://library.e.abb.com/public/67c5367296a54be7b84a4b67310b0165/3BSE004512R501_A_en_Advant_Controller_450_v_231.pdf
ABB Advant Master AC450 and Advant MOD 300 AC460 Limited-phase spare-parts notice	https://library.e.abb.com/public/65fd01d9592c4ac09ff7f4b88c67adc7/ADVANT%20Master%20AC%20450%20-%20ADVANT%20MOD%20300%20AC%20460%20Limited%20HZG000081%20A.pdf