

Memory/Flash Size Supported in Catalyst Switch Platforms

Document ID: 24050

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Introduction

This document provides a matrix of minimum and maximum memory available on the Catalyst switch platforms. Only switches that support variable memory options are referenced in this document. Fixed memory switches are not discussed.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Memory/Flash Size Matrix

These memory devices are included in the matrix:

- DRAM/SDRAM Memory used to perform the CatOS or IOS system images.
- NVRAM Memory used to store start-up configuration file (nvram:).
- OnBoard Flash Memory used to hold system images for booting (bootdisk: or bootflash: or flash:).
- Removable Flash Memory which can be removed from the system which typically holds system images (slot0: or disk0: or disk1:).

Catalyst Switch	DRAM	NVRAM	OnBoard Flash	Removable Flash
Catalyst 8540				

	256MB	512KB	8/16MB	16/20/28/48MB
Catalyst 8510				
	64MB	128KB	8/16MB	16/20MB
Catalyst 6000/6500				
Supervisor 1 ¹	64MB	512KB	16MB	16/24/64MB
Supervisor 1A ¹	64/128MB	512KB	16MB	16/24/64MB
Supervisor 2 ²	128/256/512 MB	512KB	32MB	16/24/64MB Some models support up to 1 GB ³
Supervisor 2U ²	256/512MB	512KB	32MB	16/24/64MB Some models support up to 1 GB ³
Supervisor 720 ⁴	512MB default, upgradeable to 1GB	2MB	64MB	Compact Flash type II 64/128/256MB, hardware supports 512MB and 1GB
Supervisor 720-3B ⁴	512MB default, upgradeable to 1GB	2MB	64MB	Compact Flash type II 64/128/256MB, hardware supports 512MB and 1GB
Supervisor 720-3BXL ⁴	1GB default	2MB	64MB	Compact Flash type II 64/128/256MB, hardware supports 512MB and 1GB
Supervisor 32	256MB / 512MB, upgradeable to 1GB	2MB	256MB	Compact Flash type II 64/128/256MB, hardware supports
Supervisor 32 PISA	512MB / 1GB	2 MB	512MB, upgradeable to 1GB	512MB and 1GB Compact Flash type II 64/128/256/512MB and 1GB
MSFC1	64/128MB	512KB	16MB	
MSFC2	128/512MB	512KB	32MB	
MSFC2A	1GB		256MB	
MSFC3	512/1GB	2MB	64MB	
Catalyst 5000/5500				

Supervisor I	4/20MB DRAM	128KB	4/8MB	none
Supervisor II	16/32MB DRAM	256 KB	8/16MB	none
Supervisor IIG (WS-X5540)	32MB DRAM	512 KB	8MB	none
Supervisor III	32/64MB DRAM	512 KB	8MB	8/16/20MB
Supervisor IIIG (WS-X5550)	32MB DRAM	512 KB	8MB	none
Catalyst 4000/4500				
Supervisor I	32/64MB SDRAM	512KB	12MB	none
Supervisor II	64/128MB SDRAM	512KB/1MB	12MB	none
Supervisor II Plus ⁵	256MB	No. Uses	32MB	Compact Flash (64/128MB)
Supervisor II Plus 10-GE ⁵	SDRAM 256MB SDRAM, upgradeable to 512MB	bootflash No. Uses bootflash	64MB	Compact Flash (64/128MB)
Supervisor III	256MB SDRAM	512KB	64MB	Compact Flash (64/128MB)
Supervisor IV	512MB SDRAM	512KB	64MB	Compact Flash (64/128MB)
Supervisor V	512MB SDRAM	512KB	64MB	Compact Flash (64/128MB)
Supervisor V-10GE ⁵	512MB	No. Uses	64MB	Compact Flash (64/128MB)
Supervisor 6-E ⁵	SDRAM 512MB SDRAM, upgradeable to 1GB	bootflash No. Uses bootflash	128MB	Compact Flash (64/128MB)

¹**Catalyst 6500/6000 Supervisor Engine 1** The DRAM on a Supervisor 1 for the Catalyst 6500/6000 cannot be upgraded. The DRAM on a Supervisor 1A for the Catalyst 6500/6000 is upgradeable from 64 to 128 MB. Supervisor 1As shipped after June 2004 have 128 MB of DRAM by default.

The upgrade of the DRAM on a Supervisor 1A with an MSFC1 (part number WS-X6K-SUP1A-MSFC) requires an upgrade to an MSFC2 beforehand. An upgrade kit which includes the MSFC2 (part number MEM-S1-128MB-UPG=) is available. Refer to Catalyst 6500 Series Supervisor Engine 1A DRAM Upgrade Installation Note.

²**Catalyst 6500/6000 Supervisor Engines 1 and 2** Flash Cards for the Catalyst 6500/6000 Supervisor Engine 1, 1A and 2 have minimum ROMMON, software version, and other requirements. Refer to Catalyst 6000 Family Flash Card Install Note.

³**Catalyst 6500/6000 Supervisor Engine 2** The Supervisor Engine models WS-X6K-S2-PFC2, WS-X6K-S2-MSFC2, and WS-X6K-S2U-MSFC2 support the Compact flash of 64, 128, 256, 512 MB, and 1 GB.

⁴**Catalyst 6500/6000 Supervisor Engine 720** Only the Supervisor Engine 720 has two removable flash card slots. The slot labeled disk0: supports a Compact Flash Type II card only. The slot labeled disk1: supports either a Compact Flash Type II card or a 1-GB MicroDrive. You can connect different types of Compact Flash cards on these slots. For example, you can connect MEM-C6K-CPTFL128M on disk0: and MEM-C6K-CPTFL512M on disk1:.

⁵**Catalyst 4500/4000 Supervisor Engines II Plus, II Plus 10-GE, V-10GE, 6-E** These supervisors use Onboard Flash to store configuration files and does not use a separate NVRAM device.

Related Information

- [Catalyst 6500 Series Switch Supervisor Engine Guide](#)
- [Release Notes for Catalyst 6000 Family Supervisor Engine 2 ROMMON Software](#)
- [Tools and Resources – Cisco Systems](#)
- [Technical Support & Documentation – Cisco Systems](#)

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Updated: Mar 20, 2008

Document ID: 24050
