

# Memory/Flash Size Supported in Catalyst Switch Platforms

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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

<b>Catalyst 8540</b>				
	256MB	512KB	8/16MB	16/20/28/48MB
<b>Catalyst 8510</b>				
	64MB	128KB	8/16MB	16/20MB
<b>Catalyst 6000/6500</b>				
Supervisor 1 <sup>1</sup>	64MB	512KB	16MB	16/24/64MB
Supervisor 1A <sup>1</sup>	64/128MB	512KB	16MB	16/24/64MB
Supervisor 2 <sup>2</sup>	128/256/512 MB	512KB	32MB	16/24/64MB Some models support up to 1 GB <sup>3</sup>
Supervisor 2U <sup>2</sup>	256/512MB	512KB	32MB	16/24/64MB Some models support up to 1 GB <sup>3</sup>
Supervisor 720 <sup>4</sup>	512MB default, upgradeable to 1GB	2MB	64MB	Compact Flash type II 64/128/256MB, hardware supports 512MB and 1GB
Supervisor 720-3B <sup>4</sup>	512MB default, upgradeable to 1GB	2MB	64MB	Compact Flash type II 64/128/256MB, hardware supports 512MB and 1GB
Supervisor 720-3BXL <sup>4</sup>	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	

<b>Catalyst 5000/5500</b>				
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
<b>Catalyst 4000/4500</b>				
Supervisor I	32/64MB SDRAM	512KB	12MB	none
Supervisor II	64/128MB SDRAM	512KB/1MB	12MB	none
Supervisor II Plus <sup>5</sup>	256MB	No. Uses	32MB	Compact Flash (64/128MB)
Supervisor II Plus 10-GE <sup>5</sup>	SDRAM, upgradeable to 512MB	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 <sup>5</sup>	512MB	No. Uses	64MB	Compact Flash (64/128MB)
Supervisor 6-E <sup>5</sup>	SDRAM, upgradeable to 1GB	No. Uses bootflash	128MB	Compact Flash (64/128MB)

<sup>1</sup>**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.

<sup>2</sup>**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.

<sup>3</sup>**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.

<sup>4</sup>**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:.

<sup>5</sup>**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.

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## 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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