The Three Different Methods To Reflash Your BIOS on SuperMicro C7 Motherboards

### 1. Update the BIOS from Window (SuperDoctor 5.0/SD5)

SuperDoctor 5 (SD5) is a system agent that runs on monitored hosts designed by Supermicro to provide local system health and information. SD5 supports a Web-based interface and a command-line interface on the Windows platforms.

#### Installation

- a. Execute the SD5 installer. Note that you must have Administrator privileges to install and run SD5.
- b. Click the "Next" button to continue.



c. Select the "I accept the terms of the License Agreement" option and click the "Next" button to continue.



d. Click the "Choose" button to select a directory to install SuperDoctor 5 and click the "Next" button to continue.



e. Select "Built-in (JRE 1.8.0\_51)" built-in Java VM and click the "Next" button.

Supe	ermicro SuperDoctor 5 (SD5) Installer
	Choose a Java VM
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose an install folder</li> <li>Choose a Java VM</li> <li>Check SNMP Service</li> <li>Setup a key store</li> </ul>	Please choose a Java VM for use by the installed application. Select "Built-in" option to use built-in Java VM or select "Choose a Java VM" option to use another Java VM version.
<ul> <li>Setup ports</li> <li>Configure web</li> <li>Pre-Installation summary</li> <li>Installing</li> <li>Install Complete</li> </ul>	● Built-in (JRE 1.8.0_51) ○ Choose a Java VM
InstallAnywhere by Macrovision – Cancel	Previous Next

If the Microsoft Windows SNMP service is not installed, you can either:

→ Exit the installation program to manually install the Microsoft Windows SNMP

```
Or
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→ Install SuperDoctor 5 without the SNMP extension.



f. Select "Yes" to use the default key stores and click the "Next" button to continue. For more information on how the key stores are used, see *9 SSM Certification* in this manual.

Sup Sup	ermicro SuperDoctor 5 (SD5) Installer
	Setup a key store
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose an install set</li> <li>Choose an install folder</li> <li>Choose a Java VM</li> <li>Check SNMP Service</li> </ul>	Do you want to use the default key stores provided by the installer? A key store contains public keys or private keys that are used to create a secure communication channel between the SuperDoctor 5 and its callers (i.e., the SSM Server, SSM Web, and SSM CLI).
<ul> <li>Setup a key store</li> <li>Setup ports</li> <li>Configure web</li> <li>Pre-Installation summary</li> <li>Installing</li> </ul>	● Yes ○ No
<ul> <li>Install Complete</li> </ul>	
InstallAnywhere by Macrovision - Cancel	Previous Next

g. Three communication modes are supported in SuperDoctor 5. See 3.2 Connection Modes for more information. By default, Mode B (SSL) and Mode C (Keypair) are enabled when SuperDoctor 5 is installed.
 You can configure the port numbers. Click the "Next" button to continue.

Supe	ermicro SuperDoctor 5 (SD5) Installer
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose an install set</li> <li>Choose an install folder</li> <li>Choose a Java VM</li> <li>Chock SNMP Service</li> <li>Setup a key store</li> <li>Setup ports</li> <li>Setup ports</li> <li>Configure web</li> <li>Pre-Installation summary</li> <li>Install formulate</li> </ul>	Image: Constant structure       Image:
InstallAnywhere by Macrovision – Cancel	Previous

h. SuperDoctor 5 provides the Web console "SD5 Web" (see 4 SD5 Web in this manual for more information).
 Select "Yes" to enable the SD5 Web. You can also configure the default HTTP port number and the default HTTPS port number to access the SD5 Web. When completed, click the "Next" button to continue.

🐮 Supe	ermicro SuperDoctor 5 (SD5) Installer
	Configure web
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose an install set</li> <li>Choose an install folder</li> <li>Choose a Java VM</li> <li>Check SNMP Service</li> </ul>	The SuperDoctor 5 contains a plugable Web server module that can be enabled or disabled. You can also configure the default HTTP and HTTPS port numbers of the SuperDoctor 5 Web if it is enabled.
Setup a key store	Do you want to enable the SuperDoctor 5 Web?
<ul> <li>Setup ports</li> <li>Configure web</li> <li>Pre-Installation summary</li> <li>Installing</li> <li>Install Complete</li> </ul>	Yes O No HTTP Port 8181 HTTPS Port 8444
InstallAnywhere by Macrovision – Cancel	Previous

i. Click the "Install" button to install the SuperDoctor 5 software on your computer.



The installation is complete. Note that you do not need to reboot your computer to use SD5. Click the "Done" button to exit.



SD5 Web Login

Type the following URL in your browser to connect to the SD5 Web: http://[SuperDoctor 5 address]:8181/SuperDoctor5

The login page is shown below.

			Select Language :	English
Us	er Name:		1	
Pa	ssword:			
		Login		

The default user name and password are ADMIN and ADMIN.

## SD5 Configuration Folder

Clicked and selected "Configuration" menu from 3<sup>rd</sup> folder, then clicked and selected "Flash BIOS" Submenu



#### SD5 BIOS Flash

Current BIOS information	
Manufacturer:	American Megatrends Inc. a
Version:	1.1
Release Date:	2/5/15
SMBIOS Major Version:	2
SMBIOS Minor Version:	8
SMBIOS Present:	TRUE
ROM Size (KB):	8192
UEFI Supported:	TRUE
3IOS flash history 2015/05/05 20:39:06 Flash BIOS x10dri15.331 in 252 se 2015/05/05 00:30:27 Flash BIOS x10dri15.414 in 260 se	conds successfully and backup the original BIOS to BIOS_20150505-203456.BAK conds successfully and backup the original BIOS to BIOS_20150505-002608.BAK
3IOS flash history 2015/05/05 20:39:06 Flash BIOS x10dri15.331 in 252 se 2015/05/05 00:30:27 Flash BIOS x10dri15.414 in 260 se Jpload BIOS	conds successfully and backup the original BIOS to BIOS_20150505-203456.BAK conds successfully and backup the original BIOS to BIOS_20150505-002608.BAK

Information shown below is from the screen above:

a. Current BIOS information: The table displays the current BIOS version, release date and ROM size.

- b. BIOS flash history: The BIOS flashing activities via SuperDoctor 5 is logged in the list. The flashing is logged whether it is successful or not. If you have never used SD5 to flash the BIOS before, the history field is empty.
- c. Upload BIOS: A user can browse and select the correct BIOS file either from our website or Supermicro Technical Support. Click "Browse" to select the desired BIOS binary file and then click "Upload" to upload the file to the "Available BIOS" field. If you have never uploaded a BIOS binary file in SD5, the "Available BIOS" field will be empty.
- d. Available BIOS block: The list contains BIOS binary files backed up or uploaded in SD5. Note that to prevent the BIOS from being corrupted, you are required to disable ME (Intel Management Engine) before updating the BIOS. Find disable or enable update ME or enable ME FW Image RE-flash in the BIOS setup menu.
- e. Flash BIOS: When you select the BIOS binary file from "Available BIOS" block, you may click the "Flash" button then SD5 will run rest of the BIOS flash procedure automatically.
- f. Select a BIOS to start flashing. A warning message will appear to remind you to not remove the AC power or turn off the computer until the BIOS flash is completed (see the figure below).



g. Another warning message will show up to remind you to reboot the system for the changes to take effect (see the figure below).



The original BIOS will be backed up in the [install folder]\BIOS\rom folder if the BIOS is flashed successfully.

### 2. Update the BIOS from DOS

If you choose to update the BIOS from DOS, you will need to:

- a. Create a bootable drive (USB memory stick, CD/DVD, external HDD)
- b. Copy the BIOS file(s) to the bootable drive.
- c. Then reboot your system and boot from this drive.

You can download the BIOS/Firmware as a .zip file (e.g., MB C7Z170-SQ) from our website.



Extract the .zip file and save the BIOS file to your computer.

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ime	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment	CRC	Method	Host OS	1
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Follow the steps below to extract the BIOS file and flash the BIOS via command line:

- 1. Extract the files to a DOS bootable device (such as a bootable USB stick, CD).
- 2. Boot to a DOS prompt and type: Flash.BAT BIOSname.###.
- 3. Do not interrupt the process until the flashing is complete.

- 4. After you see the BIOS is complete message, uplug the AC, clear the CMOS, plug in the AC power cord and power on the system.
- 5. Go to the BIOS setup screen and press F3 to load the default and press F4 to save and exit.

### 3. Update the BIOS from the BIOS (SuperFlash)

A third method of updating the BIOS involves using the BIOS itself. We provide you with the "SuperFlash Utility" in the Management section of the BIOS.

- 1. Using a different system, copy the latest version of the BIOS binary image file into a USB flash device.
- 2. Insert the USB device that contains the new BIOS binary image.
- 3. Boot up the system into the BIOS setting screen.
- 4. Click "MANAGEMENT" on the menu bar.
- 5. Click on the "SuperFlash Utility" submenu.

SYSTEM INFORMATION	ACPI Settings Consol	Redirection SuperFlash Utility	
PROCESSOR/ CPU	*** Please Press TOP "SuperFlash U	Itility" to run SYSTEM Configure Setting, ***	T T
		N/A	
	Product : C/21/0-SQ	N/A	
TAL OVERCLOCKING	Date : 11/11/2015		
	Time : 19:11:27	N/A	
	11116 - 19.11.27	N/A	
BOOTING			
			Mouse Right Click Show Item Help
			F1: Help Page F3: Load Optimized Default F4: Save & Exit Setup
	6		-
SECURITY	Prefile	SUPERMICRO SUPERMICRO C72170-SQ	Save & Load

6. Click "Yes" on the pop-up menu.

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<ul> <li>PRODESSOR/ OPU</li> <li>*** Please Press TOP "Supperflash Utility" to run SYSTEM Configure Setting. ***         <ul> <li>color color color</li> <li>color color color color</li> <li>color color col</li></ul></li></ul>	BYSTEN INFORMATION		le Redirection:	
weikere BIDS>>         Product: C72170-SQ       N/A         Date: 11/11/2015       N/A         Date: 11/11/2015       N/A         Time: 19:11:27       N/A         Feter SuperFlash!!       .         Product: 07:170-SQ       Product: 07:170-SQ         Image: Part Action of the state o	PROCESSOR/ CPU		Jtility" to run SYSTEM Configure Setting. ***	
Product: C72770-50     N/A       BiosTag: 10888     N/A       Date: 11/11/2015     N/A       Image: 11/11/20		«ON Board BIOS»		
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Date: 11/11/2015 N/A Time: 19:11:27 N/A Fine: 19:11:27 N/A Fine	27 OVERCLOCKING			
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BOOTING     INPUT/OUTPUT     I. Ness "ref" System will auto reboot to configure system to Flash mode     I. Ness "Fight Click Show Item     Holp     FI: Help Page     FI: Sold Optimized Default     FI: Step     FI: Sold     F		Enter Sup	erFlash!!	
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7. Click "OK" on the pop-up menu.

SYSTEM INFORMATION	AT#1 Settings Conse	Superflam builty	
PROCESSOR/ CPU			
2 OVERCLOCKING	BiosTag : 10888 Date : 11/11/2015 Time : 19:11:27	N/A N/A N/A	
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	1. Please Select ( 2. Press Start Fla 3. Waitting for S If You don't flash	Correct BIOS Files. sets to Flash BIOS. system. h BIOS, please select "Exit without Save"	
H/W MONITOR		a	
MANAGEMENT			
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SECURITY		SUPERMICRO C72170-SQ	Copyright (C) 2018 American Megatrenda, Inc.

8. Click "Select File" in the BIOS information page.

SYSTEM INFORMATION	ACPE5attings Const	ole Redirection SuperFlash Utility	
PROCESSOR/ CPU			
COVERCLOCKING			
	Keep SMBIOS Data Select	File Enabled	
H/W MONITOR			
		Cancel	
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9. Click "USB flash disk" which contains the BIOS file.

	(		
STSTEM INFORMATION			
PROCESSOR/ CPU			
CVERCLOCKING			
	Keep SMBIOS Data	elect File	
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10. Click the BIOS file name in the pop up menu.

	Reno SMETOS Data Select File These Trans	t File	
	्र (7) (1) (1) (1) (1) (1) (1)	1970-59- 170-59- 1587a- 1170-Ma 56A5- 56A5-	
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		19_189 5AT5-3265 09 W. 1705-311	
		Cancel	
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11. Click "Start Flash" in the BIOS information page to start the flash.

SYSTEM INFORMATION	ACPI Settings 64	onsole Redirection SuperFlash Utility		
PROCESSOR/ CPU	< <on bios="" board="">&gt; Product : C7Z170-SQ</on>	< <new bios="">&gt; Product : C72170-SQ</new>		
COVERCLOCKING	BiosTag : 1088B Date : 11/11/2015 Time : 19:11:27	BiosTag : 1088B Date : 11/11/2015 Time : 19:11:27		
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BOOTING				
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CHIPSET	Profiles	SUBERIALIZE		
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# 12. The BIOS is flashing......

		Enabled ()	
CC MEMORY	Select File		
	Start Flash Update NVRAM		
	Update NVRAM		
	Progress		
	and the second	and the second se	
			-
SECURITY	Profiles		Save & Load

13. The flash is now complete, click "OK" to continue.

SYSTEM INFORMATION	ACPT Settings Conse	to Redirection	
PROCESSOR/ OPU			
23 OVERCLOCKING	BiosTag : 1088B Date : 11/11/2015 Time : 19:11:27	Biosrag : 10988 Date : 11/11/2015 Time : 19:11:27	
	Select File	(Enabled ()	
	FLASH Successed	I Please Cold Reset your system	
H/W MONITOR			
CHIPSET	Profiles	SUPERMICE	Save & Load
SECURITY	C C	SUPERMICRO C7Z170-SQ	Copyright (C) 2015 American Megatrends, Inc.

14. The system will restart and press the "Del" key to enter BIOS menu.



15. Check for the updated BIOS version on the System Information page.

() SYSTEM INFORMATION	Motherboard	CPU Memory			
PROCESSOR/ CPU	Supermicro C72170-SQ BIOS Version	1.0¢			
27 OVEROLOCKING	Build Date and Time System Date System Time	11/11/2015 19:11:27 10/21/2015 14:33:52			
BOOTING					
			•	Mouse Right Click Sho Help	w Item
HAN MONITOR				F1: Help Page F3: Load Optimized De F4-Save & Exit Setup ESC: Exit	
				2	
# CHIPSET	Profiles	SUPERMICRO			Save & Load
SECURITY		SUPERMICRO C7Z170	I-SQ	Copyright (C) 2015 American	Megatrends, Inc.

# 16. Press "F3" to load optimized default setting. Click "OK"

G SYSTEM INFORMATION	246rtheirtioari3	enge en	
PROCESSOR/ CPU	Supermicro C72170-SQ BIOS Version		
UVERCLOCKING	Build Date and Time System Date System Time		
MEMORY	Load Optin	mized Defaults	
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H/W MONITOR		OK Cancel	
	Profiles	SUPERMICRO	Save & Load
BECURITY		SUPERMICRO C7Z170-SQ	Copyright (C) 2015 American Megatrends, Inc.

17. Then, you can change any setting inside the BIOS. Press "F4" Save and Exit setup.

SYSTEM INFORMATION	Hetherspand GN Merrin	
PROCESSOR/ CPU	Supermicro C7Z170-SQ B105 Version 1:0c	
DVERCLOCKING	Build Date and Time         11/11/2015 19:11           System Date         10/21/2015           System Time         14:33:56	
	Save Changes and Exit	
BOOTING	Save configuration and exit?	
		Mouse Right Click Show Item Heip F1-Help Page
H/W MONITOR	Gis Cancel	F3: Load Optimized Default F4: Save & Exit Setup LESC: Exit
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