



## EMC CX Series Storage Systems

### Disk and FLARE OE Matrix

P/N 014003111

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For CX3 UltraScale™ series storage systems, refer to the *EMC CX3 UltraScale Series Storage Systems Disk and FLARE OE Matrix* (P/N 300-009-312).

To function properly, disks in an EMC® CLARiiON® system require that each storage processor run minimum revisions of the EMC FLARE® Operating Environment (FLARE OE). This document lists the disk part numbers supported for CX series storage systems and the minimum software revisions required for each disk model.

The disk part number (PN) appears on a label on the front of the disk carrier.



#### CAUTION

**Verify that the proper version of FLARE OE is running on the storage system before installing any disk drives. Results ranging from non-recognition of the drives to data loss may occur if an improper FLARE OE version is installed.**

### CX series systems

Before installing a new disk in a storage system, use EMC Navisphere® Manager to determine the FLARE OE revision running on the storage system. In Navisphere Manager the FLARE OE revision appears on the

**Software** tab of the **Storage System Properties** dialog box for the storage system. If this revision is lower than the minimum revision required for the disk, as listed in the tables that follow, you must upgrade FLARE OE on the storage system before installing the disk. We recommend that you upgrade FLARE OE with the Software Assistant in the Navisphere Service Taskbar (NST), though you can use the Navisphere Secure CLI.

[Table 1](#) lists the Fibre Channel interface disk modules supported by CX series systems, and the minimum FLARE OE required for each one.

[Table 2](#) lists the ATA interface disk modules supported by CX series systems, and the minimum FLARE OE required for each one.

Changes and additions in the tables since the last revision of this document are noted in **bold blue** type.

### Supported disk array enclosures

[Table 3](#) lists the disk-array enclosures (DAEs) supported for CLARiiON storage systems, and [Table 4](#) lists the disk models supported for these DAEs.

**Table 1 Fibre Channel interface disk modules - Minimum FLARE OE revisions required**

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
500 GB	CX-2G72-500	PN005048696	CO	2 Gb FC	7.2K rpm	CX700	02.24.700.5.007
		PN005048809	CO			CX500	02.19.700.5.007
							02.24.500.5.007
							02.19.500.5.007

<sup>1</sup> In the RoHS column, CO = RoHS compliant; NC = not RoHS compliant.

<sup>2</sup> Where x is 1 when Access Logix is installed and 0 when it is not.

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
						CX300	02.24.300.5.007 02.19.300.5.007
450 GB	CX-4G15-450	PN005048849	CO	4 Gb FC	15K rpm	CX700	02.26.700.5.014
		PN005048927	CO			CX500	02.26.500.5.014
		PN005048951	CO			CX300	02.26.300.5.014
		PN005049032	CO				
		PN005049120	CO				
		PN005049158	CO				
		PN005048970	CO				

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
300 GB	CX-4G15-300	PN005048731 PN005048741 PN005048848 <b>PN005048856</b> <b>PN005049156</b> <b>PN005048969</b> PN005048926 PN005048950 PN005049031 <b>PN005049119</b>	CO CO CO <b>CO</b> <b>CO</b> <b>CO</b> CO CO CO <b>CO</b>	4 Gb FC	15K rpm	CX700	02.26.700.5.005 02.24.700.5.006 02.19.700.5.007 02.16.700.5.004 02.07.700.5.003
						CX600	02.19.600.5.007 02.16.600.5.004 02.07.600.5.003
						CX500	02.26.500.5.005 02.24.500.5.006 02.19.500.5.007 02.16.500.5.004 02.07.500.5.003
						CX400	02.19.400.5.007 02.16.400.5.004 02.07.400.5.003
						CX300	02.26.300.5.005 02.24.300.5.006 02.19.300.5.007 02.16.300.5.004 02.07.300.5.003
						CX200	02.19.200.5.007 02.16.200.5.004 02.07.200.5.003

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
300 GB	CX-4G10-300	PN005048953	CO	4 Gb FC	10K rpm	CX700	02.07.700.5.003
		<a href="#">PN005049117</a>	CO			CX600	02.07.600.5.003
		<a href="#">PN005048972</a>	CO			CX500	02.07.500.5.003
		<a href="#">PN005048841</a>	CO			CX400	02.07.400.5.003
		<a href="#">PN005048751</a>	CO			CX300	02.07.300.5.003
		<a href="#">PN005048842</a>	CO			CX200	02.07.200.5.003
		<a href="#">PN005048836</a>	CO				
		<a href="#">PN005049162</a>	CO				
	CX-2G10-300	PN005048532	NC	2 Gb FC	10K rpm	CX700	02.07.700.5.005
		PN005048582	CO			CX600	02.07.600.5.005
		PN005048597	NC			CX500	02.07.500.5.005
		PN005048633	NC			CX400	02.07.400.5.005
		PN005048564	NC			CX300	02.07.300.5.003
		PN005048616	NC				
		PN005048625	NC				
		PN005048699	CO				
		PN005048703	NC				
		PN005048751	CO				
		PN005048808	CO				
		PN005048836	CO				
		PN005048953	CO			CX200	02.07.200.5.003
		<a href="#">PN005048972</a>	CO				
		<a href="#">PN005049162</a>	CO				
		<a href="#">PN005048841</a>	CO				
		<a href="#">PN005048842</a>	CO				
		<a href="#">PN005049117</a>	CO				
146 GB	CX-4G15-146 CX-2G15-146	PN005048730	CO	4/2 Gb FC	15K rpm	CX700	02.06.700.5.003
		PN005048847	CO			CX600	02.02.x.60.5.003
		<a href="#">PN005048855</a>	CO			CX500	02.06.500.5.003
		<a href="#">PN005048847</a>	CO			CX400	02.02.x.40.5.004
		<a href="#">PN005048740</a>	CO			CX300	02.06.300.5.003
		<a href="#">PN005048844</a>	CO			CX200	02.03.x.20.5.001

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
						CX200LC	02.04.x.20.5.002

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
146 GB	CX-2G15-146	PN005048534	NC	2 Gb FC	15K rpm	CX700	02.06.700.5.003
		PN005048584	CO			CX600	02.02.x.60.5.003
		PN005048602	NC			CX500	02.06.500.5.003
		PN005048618	NC			CX400	02.02.x.40.5.004
		PN005048627	CO			CX300	02.06.300.5.003
		PN005048847	CO			CX200	02.03.x.20.5.001
		PN005049440	CO			CX200LC	02.04.x.20.5.002
		PN005048730	CO				
		PN005048844	CO				
		PN005048968	CO				
		PN005048846	CO				
		PN005048834	CO				
		PN005048855	CO				
	PN005048588	NC	2 Gb FC	15K rpm	CX700	02.06.700.5.001	
					CX600	02.06.600.5.001	
					CX500	02.06.500.5.001	
					CX400	02.06.400.5.001	
					CX300	02.06.300.5.001	
					CX200 CX200LC	02.06.200.5.001	
	CX-2G10-146	PN005048128	CO	2 Gb FC	10K rpm	CX700	02.06.700.5.003
		PN005048255	NC			CX600	02.02.x.60.5.003
		PN005048491	NC			CX500	02.06.500.5.003
		PN005048495	CO			CX400	02.02.x.40.5.004
		PN005048531	NC			CX300	02.06.300.5.003
		PN005048563	NC			CX200	02.03.x.20.5.001
		PN005048581	CO				
		PN005048615	NC				

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
		PN005048624	CO				
		PN005048632	NC				
		PN005048698	CO				
		PN005048702	CO			CX200LC	02.04.x.20.5.002
		PN005048807	CO				
		<b>PN005048971</b>	<b>CO</b>				



Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
146 GB	CX-2G10-146	PN005048031 PN005048442 PN005048598 PN005048604	NC NC CO NC	2 Gb FC	10K rpm	CX700	02.06.700.5.003
						CX600	02.06.600.5.005
						CX500	02.06.500.5.003
						CX400	02.06.400.5.004
						CX300	02.06.300.5.003
						CX200 CX200LC	02.06.200.5.004
73 GB	CX-2G15-73	PN005048290 PN005048583 PN005048600 PN005048617 PN005048626 <b>PN005048833</b> <b>PN005048845</b> <b>PN005049015</b>	NC CO NC NC CO <b>CO</b> <b>CO</b> <b>CO</b>	2 Gb FC	15K rpm	CX700	02.06.700.5.003
						CX600	02.01.x.60.5.006
						CX500	02.06.500.5.003
						CX400	02.02.x.40.5.004
						CX300	02.06.300.5.003
						CX200	02.03.x.20.5.001
						CX200LC	02.04.x.20.5.002
		PN005048533 PN005048589	NC NC	2 Gb FC	15K rpm	CX700	02.06.700.5.001
						CX600	02.06.600.5.001
						CX500	02.06.500.5.001
						CX400	02.06.400.5.001
						CX300	02.06.300.5.001
						CX200 CX200LC	02.06.200.5.001

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
73 GB	CX-2G10-73	PN005048129	NC	2 Gb FC	10K rpm	CX700	02.06.700.5.003
		PN005048257	NC			CX600	02.01.x.60.5.006
		PN005048443	NC			CX500	02.06.500.5.003
		PN005048492	NC			CX400	02.02.x.40.5.004
		PN005048496	CO			CX300	02.06.300.5.003
		PN005048516	NC			CX200	02.03.x.20.5.001
		PN005048519	NC			CX200LC	02.04.x.20.5.002
		PN005048530	NC				
		PN005048538	CO				
		PN005048580	CO				
		PN005048562	NC				
		PN005048614	NC				
		PN005048631	NC				
		PN005048806	CO				
		PN005048812	CO				
	CX-4G15-73 CX-2G15-73	PN005048729	CO	4/2 Gb FC	15K rpm	CX700	02.06.700.5.003
						CX600	02.01.x.60.5.006
						CX500	02.06.500.5.003
						CX400	02.02.x.40.5.004
						CX300	02.06.300.5.003
						CX200	02.03.x.20.5.001
						CX200LC	02.04.x.20.5.002

Disk capacity	Model number	Part number	RoHS <sup>1</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>2</sup>
36 GB	CX-2G15-36	PN005047879 PN005048293 PN005048539 PN005048610 PN005048611	NC NC NC NC CO	2 Gb FC	15K rpm	CX700	02.06.700.5.003
						CX600	02.01.x.60.5.006
						CX500	02.06.500.5.003
						CX400	02.02.x.40.5.004
						CX300	02.06.300.5.003
						CX200	02.03.x.20.5.001
						CX200LC	02.04.x.20.5.002
	CX-2G10-36	PN005047874 PN005048357 PN005048360 PN005048498 PN005048556 PN005048566 PN005048636	NC CO NC NC NC NC NC	2 Gb FC	10K rpm	CX700	02.06.700.5.003
						CX600	02.01.x.60.5.006
						CX500	02.06.500.5.003
						CX400	02.02.x.40.5.004
						CX300	02.06.300.5.003
						CX200	02.03.x.20.5.001
						CX200LC	02.04.x.20.5.002

**Table 2 ATA interface disk modules - Minimum FLARE OE revisions required**

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
1 TB	CX-AT07-010	PN005048800	CO	SATA	7.2K rpm	CX700	02.24.700.5.014
						CX500 CX500i	02.24.500.5.014
						CX300	02.24.300.5.014
						CX300i	02.24.301.5.014
		PN005048823	CO	SATA	7.2K rpm	CX700	02.26.700.5.005 02.24.700.5.014
						CX500	02.26.500.5.005 02.24.500.5.014
						CX300	02.26.300.5.005 02.24.300.5.014
750 GB	CX-AT07-750	PN005048723 PN005048799	CO CO	SATA	7.2K rpm	CX700	02.24.700.5.006 02.19.700.5.040
						CX600	02.19.600.5.040
						CX500	02.24.500.5.006 02.19.500.5.040
						CX500i	02.24.500.5.006
						CX400	02.19.400.5.040
						CX300	02.24.300.5.006 02.19.300.5.040

<sup>3</sup> In the RoHS column, CO = RoHS compliant; NC = not RoHS compliant.

<sup>4</sup> Where x is 1 when Access Logix is installed and 0 when it is not.

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
						CX300i	02.24.301.5.006
						CX200	02.19.200.5.040

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
750 GB	CX-AT07-750	PN005048822	CO	SATA	7.2K rpm	CX700	02.26.700.5.005 02.24.700.5.006 02.22.700.5.504 02.19.700.5.040
						CX600	02.19.600.5.040
						CX500	02.26.500.5.005 02.24.500.5.006 02.22.500.5.504 02.19.500.5.040
						CX400	02.19.400.5.040
						CX300	02.26.300.5.005 02.24.300.5.006 02.22.300.5.504 02.19.300.5.040
						CX200	02.19.200.5.040
500 GB	CX-AT07-500	PN005048798 (spare for CX-AT05-320)	CO	SATA	7.2K rpm	CX700	02.24.700.5.006 02.19.700.5.019
						CX600	02.19.600.5.040
						CX500 CX500i	02.24.500.5.006 02.19.500.5.019
						CX400	02.19.400.5.040
						CX300	02.24.300.5.006 02.19.300.5.019
						CX300i CX200	02.24.301.5.006 02.19.301.5.019 02.19.200.5.040

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
500 GB	CX-AT07-500	PN005048716 (spare for CX-AT05-320)	CO	SATA	7.2K rpm	CX700	02.19.700.5.040
						CX600	02.19.600.5.040
						CX500	02.19.500.5.040
						CX500i	02.24.500.5.006
						CX400	02.19.400.5.040
						CX300	02.19.300.5.040
						CX300i	02.24.301.5.006
						CX200	02.19.200.5.040
		PN005048574 (spare for CX-AT05-320) PN005048697 (spare for CX-AT05-320)	NC CO	SATA	7.2K rpm	CX700	02.19.700.5.019
						CX600	02.19.600.5.019
						CX500 CX500i	02.19.500.5.019
						CX400	02.19.400.5.019
						CX300	02.19.300.5.019
						CX300i	02.19.301.5.019
						CX200	02.19.200.5.019
						320 GB	CX-AT05-320
CX600	02.04.x.60.5.002						
CX500	02.06.500.5.003						
CX400	02.04.x.40.5.002						
CX300	02.06.300.5.003						
CX200	02.04.x.20.5.002						

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
320 GB	Spare for CX-AT05-320	PN005048715	CO	SATA	7.2K rpm	CX700	02.19.700.5.040 02.07.700.5.016 <sup>5</sup>
						CX600	02.19.600.5.040 02.07.600.5.016 <sup>5</sup>
						CX500	02.19.500.5.040 02.07.500.5.016 <sup>5</sup>
						CX400	02.19.400.5.040 02.07.400.5.016 <sup>5</sup>
						CX300	02.19.300.5.040 02.07.300.5.016 <sup>5</sup>
						CX200	02.19.200.5.040 02.07.200.5.016 <sup>5</sup>
250 GB	CX-AT05-250	PN005047939	NC	ATA	5.4K rpm	CX700	02.06.700.5.003
						CX600	02.04.x.60.5.002
						CX500	02.06.500.5.003
						CX400	02.04.x.40.5.002
						CX300	02.06.300.5.003
						CX200	02.04.x.20.5.002
		PN005048427	NC	SATA	7.2K rpm	CX700	02.07.700.5.016
						CX600	02.07.600.5.016
						CX500	02.07.500.5.016
						CX400	02.07.400.5.016
						CX300	02.07.300.5.016
						CX200	02.07.200.5.016



Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
250 GB	CX-AT07-250	PN005048821	CO	SATA	7.2K rpm	CX700	02.26.700.5.005 02.24.700.5.006 02.19.700.5.007 02.16.700.5.003 02.07.700.5.005
						CX600	02.19.600.5.007 02.16.600.5.004 02.07.600.5.005
						CX500	02.26.500.5.005 02.24.500.5.006 02.19.500.5.007 02.16.500.5.003 02.07.500.5.005
						CX400	02.19.400.5.007 02.16.400.5.004 02.07.400.5.005
						CX300	02.26.300.5.005 02.24.300.5.006 02.19.300.5.007 02.16.300.5.003 02.07.300.5.003
						CX200	02.19.200.5.007 02.16.200.5.004 02.07.200.5.003

Disk capacity	Model number	Part number	RoHS <sup>3</sup>	Drive type	Spindle speed	Platform	Minimum FLARE OE software revision <sup>4</sup>
250 GB	Spare for CX-AT05-250 or CX-AT07-250	PN005048711	CO	SATA	7.2K rpm	CX700	02.19.700.5.040 02.07.700.5.016 <sup>5</sup>
						CX600	02.19.600.5.040 02.07.600.5.016 <sup>5</sup>
						CX500	02.19.500.5.040 02.07.500.5.016 <sup>5</sup>
						CX400	02.19.400.5.040 02.07.400.5.016 <sup>5</sup>
						CX300	02.19.300.5.040 02.07.300.5.016 <sup>5</sup>
						CX200	02.19.200.5.040 02.07.200.5.016 <sup>5</sup>

<sup>5</sup> Only if FRUMON 1.93 or later is loaded with rebootless NDU.

**Table 3 Supported disk-array enclosures (DAEs)**

DAE type	Storage systems supported			
	CX200, CX400, CX600	CX300, CX500, CX700	CX3 series <sup>6</sup>	CX4 series <sup>7</sup>
DAE2	Yes	Yes	Yes	Yes <sup>8</sup>
DAE2-ATA	Yes	Yes	Yes	Yes <sup>8</sup>
DAE2P	No	Yes	Yes	Yes <sup>8</sup>
DAE3P (DAE4P)	No	No	Yes	Yes

**Table 4 Disk models supported for disk-array enclosures (DAEs)**

DAE type	Storage systems supported				
	CX-SA	CX-2G <sup>9</sup>	CX-4G <sup>11</sup>	CX-AT <sup>10</sup>	CX-FC (EFDs)
DAE2	No	Yes	Yes	No	No
DAE2-ATA	No	No	No	Yes	No
DAE2P	No	Yes	Some <sup>11</sup>	No	No
DAE3P (DAE4P)	Yes <sup>12</sup>	Yes	Yes <sup>13</sup>	No	Yes <sup>13</sup>

<sup>6</sup> The CX3 series models are CX3-10c, CX3-20, CX3-20c, CX3-20f, CX3-40, CX3-40c, CX3-40f, and CX3-80.

<sup>7</sup> The CX4 series models are CX4-120, CX4-240, CX4-480, and CX4-960.

<sup>8</sup> The DAE2, DAE2-ATA, and DAE2P are supported. However, if you repurpose any of these DAEs (that is, reuse them from an older storage system) in a CX4 series storage system, you may have to run "Refresh Management Server State" from the Navisphere Manager Setup page for the drives to come online, and, if that does not work, you will need to reboot the SPs. Knowledgebase solution emc200651 provides more information.

<sup>9</sup> You can mix CX-2G and CX-4G model disks in the same DAE, but the maximum speed will be 2 Gb/s for the buses connected to the DAE with both these model disks.

<sup>10</sup> CX-AT model disks cannot co-exist with other disk models in the same DAE.

<sup>11</sup> The specific CX-4G model disks supported for a DAE2P depend on the storage system with the DAE2P. This document lists the supported CX-4G model disks for CX series storage systems. The *EMC CX3 UltraScale Series Storage Systems Disk and FLARE OE Matrix* and the *EMC CX4 Series Storage Systems Disk and FLARE OE Matrix* list the supported CX-4G model disks for the CX3 series storage systems and the CX4 series storage systems, respectively.

<sup>12</sup> CX-SA model disks cannot co-exist with other disk models in the same DAE.

<sup>13</sup> The *EMC CX3 UltraScale Series Storage Systems Disk and FLARE OE Matrix* and the *EMC CX4 Series Storage Systems Disk and FLARE OE Matrix* list the specific CX-4G model disks supported for the DAE3P in CX3 series storage systems and CX4 series storage systems, respectively.

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