CT0245J Submission

CT0245J is a 2OU rack-mount 45-drive JBOD for high-density, high-reliability Telco cloud applications

CT0245J 2OU JBOD

Overview

The CT0245J is a 2OU rack-mount 45-drive JBOD for high-density, high-reliability Telco cloud applications

- 12Gb SAS drive mid-plane
- Supports both 3.5” and 2.5” drives, SAS/SATA HDDs and SSDs
- Supports hot-plugging of drives
- Compliance with key GR-63-CORE chapters
- Each of the three drive sleds contains its own cable management arm (CMA)
- Removable fans at the rear of the chassis
- Chassis powered from a shared 12 VDC bus bar at the rear
- All data cables are accessible from the front of the chassis

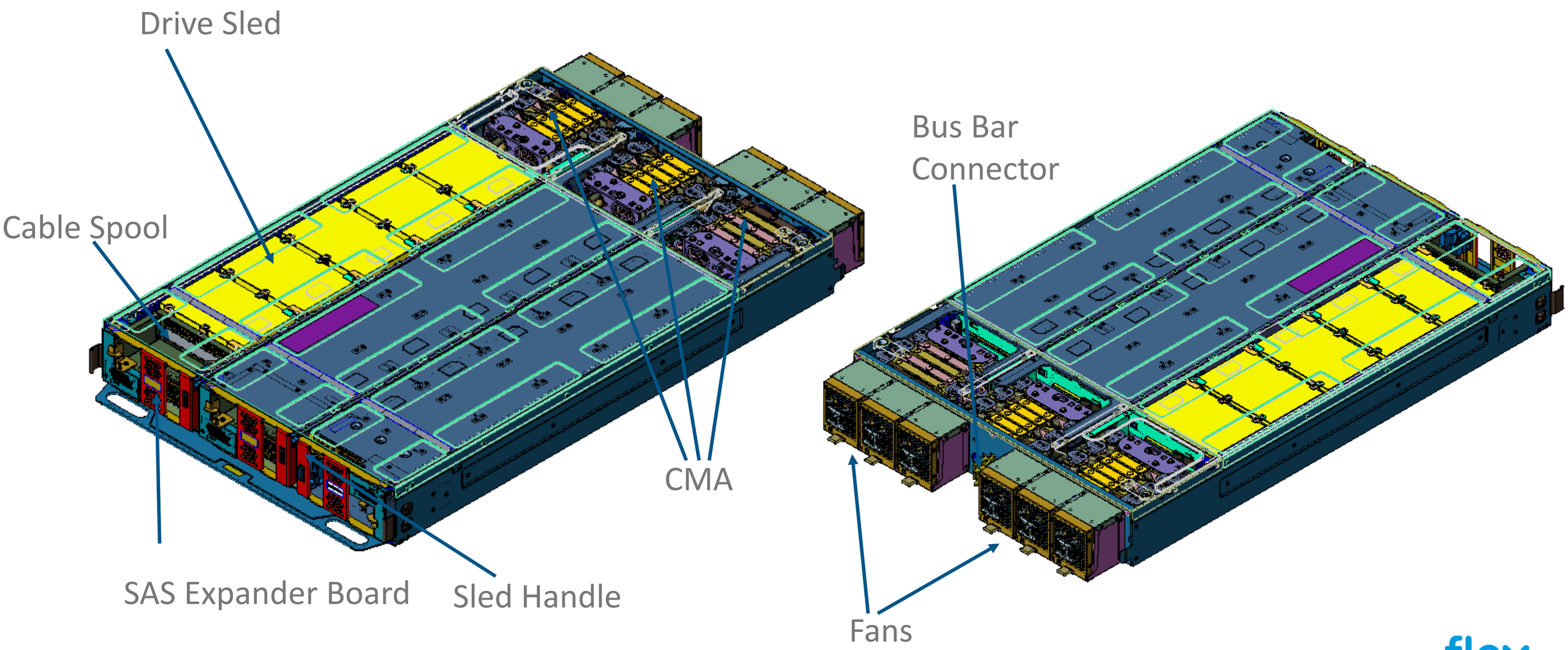




Benefits

- Highest storage density compared to shipping systems – fewer JBODs needed
- Ease of maintenance and servicing – Hot Plug drives, Hot-plug fans, embedded CMA, tool-less sled detach
- Deployable in Telco cloud data centers and not just typical data centers

CT0245J 2OU Components



CT0245J 2OU Features

Form Factor	2 OU (Open Rack) Compatible with ORv2 Cubby sub-chassis
Drives	(45) 3.5” and 2.5” SAS/SATA hot-pluggable HDDs/SSDs In three sleds with 15 drives/sled
Dimensions (D x W x H)	801 mm (excluding fans) x 537 mm x 93.2 mm
Fans	(6) Single or Dual rotor 60 mm hot-swappable
Cascade Mode	Supported
Expander Module	(3) 12Gb SAS based modules
External Ports	(2) Mini-SAS HD per Expander module
Manageability	Via SES-2
LED Indicators/Expander Module	System Power System Fault
Buttons/Expander Module	Power Reset UID with LED
Mid-plane	Drive mid-planes in each sled connected to dedicated Expander module
Power	Single 12V DC bus-bar connection
Operating Temperature	Up to 40^{0}C
Weight	wo/ HDD – 77 Lbs w/ HDD – 141.5 Lbs (10TB)
Mounting Rails	Fixed

CT0245J 2OU JBOD

OCP Principles

Efficiency - Highest storage density 2OU JBOD amongst shipping systems. 45 LFF drives versus 28/30. Results in fewer JBODs needed due to 33% more in the same rack space.

Scale – Supports cascading of drive sleds within the chassis as well as cascading of multiple chassis to closely match performance and capacity requirements of the workload/application.

Openness – Design specification submitted.

Impact – Very first Telco compliant 2OU 21” JBOD. Standards like ANSI T1.307-2007 and the requirements specified in GR-63-CORE chapter 4.2.3, fire spread criteria specified in GR-63-CORE chapter 4.2.2.2 among others. EMI shielding in front.

CT0245J – Marketing Launch

1. 2018 OCP Summit – CT0245J launched publicly in Flex booth

CT0245J 2OU SKU Ordering Info

Model	SKU	Comment
L6 w/ (45) 3.5” Carriers	CT0245J-3	Blanks in drive slots. Expanders populated.
L6 w/ (45) 2.5” Carriers	CT0245J-2	Blanks in drive slots. Expanders populated.

FRUs		Flex Part Number
3.5-inch Drive Carrier	Bulk pack	MP-00032677-000
	Single Pack	MP-00032677-001
2.5-inch Drive Carrier	Bulk pack	MP-00032678-000
	Single Pack	MP-00032678-001
FAN	Single Pack	MP-00032914-000
SAS Expander	Single Pack	MP-00032915-000

Environmental & Telco Compliance

ETSI EN300 019-1-3 Class 3.1 thermal and humidity climatogram and seismic conditions

The CT0245J components fulfil the EU RoHS directive 2011/65/EU Article 7b (EN 50581 (2012))

All materials, components, and interconnect wire and cable used within the CT0245J equipment assemblies meet the requirements of ANSI T1.307-2007 and the requirements specified in GR-63-CORE chapter 4.2.3

The CT0245J meets the fire spread criteria specified in GR-63-CORE chapter 4.2.2.2 Shelf-Level Fire-Resistance Criteria

The CT0245J meets the shock and vibration requirements according to the following IEC specifications: IEC78-2-(*) & IEC721-3-(*) Standard & Levels

EMC and Safety Certifications

Region/Country	Type	Certification
Europe	EMC	EN300386, V1.6.1
Europe	Safety	EN60950-1: 2006 + A2:2013
International	Safety	IEC 60950-1 with deviations for Australia, Denmark, Germany, Great Britain (BSI), Finland, Japan, Sweden, Norway, USA and Canada
USA	EMC	CFR 47, FCC 15, class A
International	EMC	CISPR 22 Class A and CISPR 24
India	EMC	TEC/EMI/TEL-001/01/FEB-09 and TEC/IR/SWN-2MB/07/MAR-10

Hardware Compatibility List

- Drive models in each drive category validated - 3.5” HDD, 2.5” HDD, 2.5” SSD (all thicknesses)
- Additional drive models will be validated based on customer request

Product	Description	Vendor	Part Number
3.5” HDD	8 TB SAS 12Gb/s 7200rpm 512E	Seagate	ST8000NM0075
	4 TB SATA 6Gb/s 7200rpm	Seagate	ST4000NM0085
	10 TB SAS 12Gb/s 512E	HGST	HUH721010AL5204
	10 TB SAS 12Gb/s 512E	Seagate	ST10000NM0096
2.5” HDD	300 GB SAS 12Gb/s 15Krpm 4KN	Seagate	ST300MP0005
	1.2 TB SAS 12Gb/s 512E	HGST	HUC101812CSS204
	1.2 TB SAS 12Gb/s 512E	Seagate	ST1200MM0009
2.5” SSD	480 GB SATA SM863a 7mm	Samsung	MZ-7KM480NE
	480 GB 2.5" SATA 4KN 7mm	Micron	MTFDDAK480TCC
	480 GB 2.5" SATA 4KN 7mm	Intel	SSDSC2KG480G7
	8 GB 2.5” SATA 3SR3-P 9.2mm	Innodisk	DRS25-08GD70SCAQB
	200 GB SAS 12Gb/s 15mm	HGST	HUSMM1620ASS200 / 0B31065
Mini SAS HD Cable	2-meter Mini SAS HD AWG28	FCI	10141282-3020LF
Mini SAS HD Cable	3-meter Mini SAS HD AWG28	FCI	10141282-3030LF ver.01
ORV2 Rack	Open Rack	Delta	Stingray 208V ORV2 Rack

flex

Thank You