

To: Digi-Key Corporation
Date: 01/03/2024
RE: Product Change Notification

Reason for Change/End-of-Life

Controller supplier Hyperstone has announced the end-of-life of all Hyperstone USB and Compact Flash controllers.

Description of Change

Hyperstone USB controllers (U8B, U9) and Compact Flash controllers (F2, F3, F4, F9, A1) are used in all Virtium VTUx, VTDUx, VTCx, and VTDCFx family of USB and Compact Flash products. There are no planned replacement solutions from Hyperstone. While this represents a fundamental shift in the longstanding support model from Hyperstone, both companies are working together to ensure the longest possible support for affected parts.

A key element of this support plan will require close cooperation between Virtium and affected customers to identify a path forward, which may include combinations of last-time-buys and long-term forecast and component purchase agreements. In the meantime, Virtium encourages all customers to work closely with their Virtium sales and technical marketing teams to collaborate on new designs to replace these affected USB and Compact Flash products.

Affected Products

Customer Part No.	Old Manufacturing Part No.	New Recommended Manufacturing Part No.	Serial No.
N/A	VTDCFAPC001G-1C1 VTDCFAP004G-1C1 VTDCFAP008G-1C1 VTDCFAP001G-1C1 VTDCFAP002G-1C1 VTDCFAPC004G-1C1 VTDCFBPI004G-V11 VTDCFBPI008G-100 VTDS41PI004G-100 VTDU31PI016G-1A0 VTDU31PI004G-100 VTDU31PI004G-1A0 VTDU31PI008G-1A0 VTDU34PI008G-1A0	No replacement solutions available	N/A

Traceability (How to Identify Affected Product)

Each Virtium product is marked with the part number on product and packaging labels. Product part number decoder and example label specifications listed in Appendix.

Logistics

Last-Time-Buy* (Limited quantity)	Last-Time-Ship	Qualification Samples Availability Date	Full Production Date
06/30/2024	06/30/2025 (may be extended with customer forecast and purchase commitment)	N/A	N/A

*Orders placed prior to the Last-Time-Buy date are subject to current inventory levels, which may vary based on market conditions and customer demand. Early orders are encouraged.

Please work with your Virtium account manager to plan last time buy of affected products and to schedule meetings to discuss follow-on solutions. Virtium requires formal receipt of acknowledgment of this notification. Per JEDEC Standard JESD46-C Section 3.2.3; lack of acknowledgment of this notice within 30 days constitutes acceptance of change.

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APPENDIX

- Virtium Product Part Number Decoder
- Virtium Label Specifications

Virtium Product Part Number Decoder



Storage Part No.
Template

V	T	D	U	4	2	P	I	x	x	x	x	G	-	V	#	#	-	#
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
NAND, Controller, HW/FW rev															alpha-numeric			

1	Virtium
V	Virtium

14	"_"
-	"_"

2-3	Brand
TD	TuffDrive®

15	Locked BOM
V	Standard Virtium Locked BOM
A0	Customer Specific (non-standard)
M0	Customer Specific (non-standard)
Z9	Customer Specific (non-standard)

4-6	Interface and Form Factor
CFA	CompactFlash, Type I (Gen1-Hyp F3/A1)
CFB	CompactFlash (Type-1), UDMA (Gen2 - Hyp F9)
U31	USB 2.0, 10-pin, 2.54mm pitch (Gen2-Hyp U8/U8B)
U32	USB 2.0, 10-pin, 2mm pitch (Gen2-Hyp U8/U8B)
U34	USB 2.0, USB 3.0 shortkey (Gen2-Hyp U8/U8B)
U35	USB 2.0, USB 3.0, longkey (Gen2-Hyp U8/U8B)
U41	eUSB (10-pin, 2.54mm pitch), USB 3.1/Gen 1, (Gen3 - Hyp U9)
U42	eUSB (10-pin, 2.00mm pitch), USB 3.1/Gen 1, (Gen3 - Hyp U9)
U44	USB Shortkey, USB 3.1/Gen 1, (Gen3 - Hyp U9)
U45	USB Longkey, USB 3.1/Gen 1, (Gen3 - Hyp U9)

16	Hardware Revision
#/X	Sequential Value (1-9, A-Z)

17	Firmware Revision
#/X	Sequential Value (1-9, A-Z)
D	Encryption Disabled

7	Product Class
P	PE Series - SLC NAND
C	CE Series - SLC Cache FTL
X	XE Series - pSLC FTL (Xtended endurance)


18	"_"
-	"_"

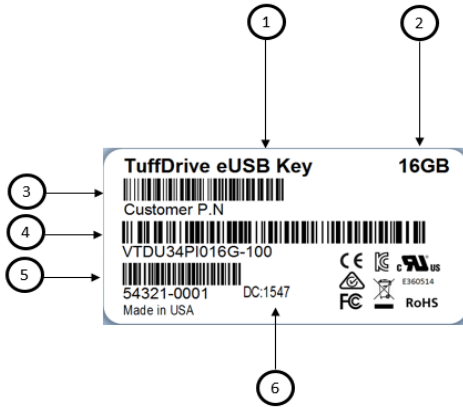
8	Operating Temperature
C	Commercial Temperature 0° to 70°C
I	Industrial Temperature -40° to 85°C

19	Special HW/FW/SW Feature
0	FAT format
1	FAT16 format
2	FAT32 format
3	NTFS format
4	Linux Ext4 format
H	Heat spreader
T	Std Security + TCG (Opal, e.Drive)
P	pFail/PLP (vtGuard+)
W	Write-protect
C	Conformal Coat
U	Component Underfill
I	Custom Interconnect (connector)
A	Anti-sulfur

9-13	Capacity
xxxM	MB - 1,000,000 bytes
xxxxG	GB - 1,000,000,000 bytes
xxxxT	TB - 1,000,000,000,000 bytes

Label Specifications

TuffDrive eUSB Short Key Label Template				 Virtium	
Revision History					
Rev.	Date	Description of Change	Prepare by	Approved by	
A	6/11/2013	Release	Luke Ninh	Frank Hoang	
A1	11/30/2015	Changed C-tick Logo to RCM Logo	Luke Ninh	Toan Lieu	




Label Manufacture (Identco)


Label Material (TT 700 Gloss White Polyester)


Label Dimension: 1.25" x 0.825" (31.75mm x 15.875mm)


Key note definitions:


- 1 Market segment, form factor and product: TuffDrive (eUSB Short Key, Nand: SLC)
- 2 Drive's Density: 16GB
- 3 Customer Part Number (BarCode 128 Symbology with Text)
- 4 Virtium part number: VTDU34PI016G-100 (BarCode 128 Symbology with Text)
- 5 Serial number: XXXXX-XXXX (BarCode 128 Symbology with Text)
- 6 Data Code: Last 2 digits of year, week number of year (YYWW)


Certified of European (CE) mark 


Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark 


Reserved for the official RCM (Australian) mark 

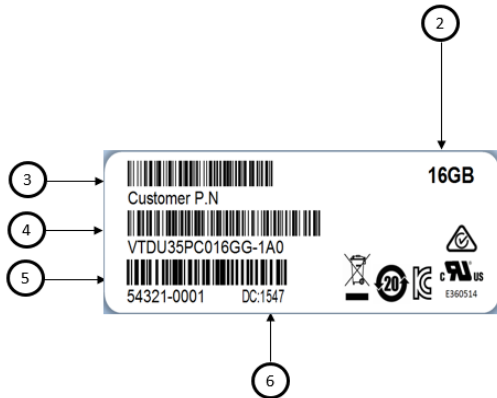
Reserved for the official Korea (KC) mark 

Reserved for the official Underwriters Laboratories (UL) mark 

Reserved for the official USA Federal Communications Commission (FCC) mark 

Country of Origin (CoO)  Made in USA

TuffDrive eUSB Long Key Label Template					
Revision History					
Rev.	Date	Description of Change	Prepare by		Approved by
A	6/11/2013	Release	Luke Ninh		Frank Hoang
A1	11/30/2015	Changed C-tick Logo to RCM Logo	Luke Ninh		Toan Lieu


Label Manufacture (Identco)
Label Material (TT 700 Gloss White Polyester)
Label Dimension: 1.50" x 0.50" (38.1mm x 12.7mm)
Key note definitions:

Market segment, form factor and product: TuffDrive (eUSB Long Key, Nand: SLC)


2 Drive's Density: 16GB


3 Customer Part Number (BarCode 128 Symbology with Text)


4 Virtium part number: VTDU34PI016G-100 (BarCode 128 Symbology with Text)

5 Serial number: XXXXX-XXXX (BarCode 128 Symbology with Text)


6 Data Code: Last 2 digits of year, week number of year (YYWW)

 Certified of European (CE) mark 

 Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark 


 Reserved for the official RCM (Australian) mark 

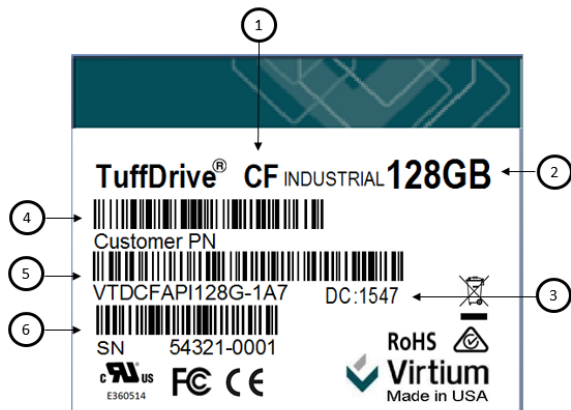
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 Reserved for the official USA Federal Communications Commission (FCC) mark 


 Country of Origin (CoO) 

TuffDrive CF Label Template				 Virtium
Revision History				
Rev.	Date	Description of Change	Prepare by	Approved by
A	6/11/2013	Release	Luke Ninh	Frank Hoang
A1	11/30/2015	Changed C-tick Logo to RCM Logo	Luke Ninh	Toan Lieu


Label Manufacture (Identco)
Label Material (TT 700 Gloss White Polyester)
Label Dimension: 1.50" x 1.20" (38.10mm x 30.48mm)
Key note definitions:

- 1 Market segment, form factor and product: Compact Flash (TuffDrive CF, Nand: SLC)
- 2 Drive's Density: 128GB
- 3 Data Code: Last 2 digits of year, week number of year (YYWW)
- 4 Customer Part Number (BarCode 128 Symbology with Text)
- 5 Virtium part number: VTDCFAP128G-1A7 (BarCode 128 Symbology with Text)
- 6 Serial number: XXXXX-XXXX (BarCode 128 Symbology with Text)


 Certified of European (CE) mark 


 Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark 

 Reserved for the official RCM (Australian) mark 

 Compliant **RoHS**

 Reserved for the official Underwriters Laboratories (UL) mark 

 Reserved for the official USA Federal Communications Commission (FCC) mark 

 Country of Origin (CoO)  Made in USA