

# **Customer Service Note**

# **Product Marks, Product Labels, and Packaging Labels**

### **Introduction**

Micron uses various marks and labels on our products and packaging. The first section of this customer service note describes the product marks and labels we place on our devices. The second section describes the labels used on and in our packaging.



# **CSN-11: Product Marks/Product and Packaging Labels**

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# **CSN-11: Product Marks/Product and Packaging Labels**

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### **Product Marks and Labels**

Most of Micron's component products use one of two product mark variations to accommodate smaller components and different package sizes (for example, FBGA and CSP). Both product marks are right- and left-justified and have a character height of 0.040–0.050 inches depending on package size. Both marks also include a unique, laser-inscribed identification number on the top side of the part for traceability purposes.

Legacy component products with Elpida part marks use the same part marks used prior to Micron's acquisition of Elpida. Further information may be found in our product guides and on Micron's Web site: www.micron.com/numbering.

## **Component Mark Information**

Most component marks contain the following details (see Figure 1 on page 5):

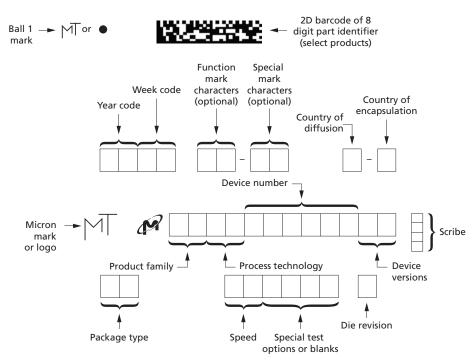
- Date code (year and workweek)
- · Special mark characters
- Country of diffusion (see below for country codes)
- · Country of encapsulation (see below for country codes)
- Micron<sup>®</sup> mark or logo
- · Product family
- Process technology
- · Device number
- Device versions
- · Package type
- Speed
- Special test option (if relevant)
- Die revision
- Scribe

For more information on product-specific designators, see the part numbering guides on Micron's Web site: www.micron.com/numbering.

Codes for the countries of diffusion and encapsulation:

1 = USA	5 = China	B = Israel
2 = Singapore	7 = Taiwan	C = Ireland
3 = Italy	8 = Korea	D = Malaysia
4 = Japan	9 = Mixed	F = Philippines

Figure 1: TSOP Component Mark



## **Abbreviated Component Mark Information**

Due to space limitations, FBGA-package component marks contain abbreviated details for two distinct types of information (see Figure 2 on page 6). The top row of the component mark contains the flooring details that are unrelated to product type:

- Date code (see below)
- · Die revision
- · Country of diffusion (see below for country codes)
- Country of encapsulation (see below for country codes)

Date codes are alphanumeric characters that indicate the year and workweek the parts were marked, in even-numbered workweeks. The first character is the last number in the year, and the second (alpha) character is the workweek.

A = 2	E = 10	I = 18	M = 26	Q = 34	U = 42	Y = 50
B = 4	F = 12	J = 20	N = 28	R = 36	V = 44	Z = 52
C = 6	G = 14	K = 22	0 = 30	S = 38	W = 46	
D = 8	H = 16	L = 24	P = 32	T = 40	X = 48	

Codes for the countries of diffusion and encapsulation:

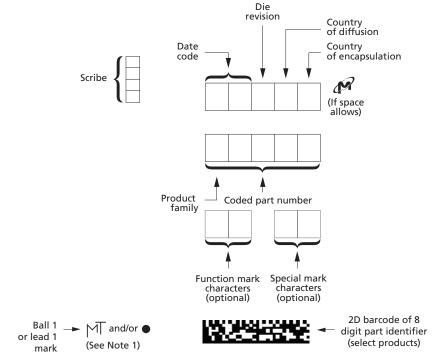
1 = USA	5 = China	B = Israel
2 = Singapore	7 = Taiwan	C = Ireland
3 = Italy	8 = Korea	D = Malaysia
4 = Japan	9 = Mixed	F = Philippines

The middle and bottom rows of the component mark contain product-specific details such as:

- Micron logo/ball 1 designator
- Coded part number
- Product family
- Special mark characters

More information on product-specific designators is provided in Micron's various part numbering guides, which are available on Micron's Web site at www.micron.com/numbering. Information on the corresponding part numbers for part mark codes is available from the FBGA Part Marking Decoder at www.micron.com/decoder.

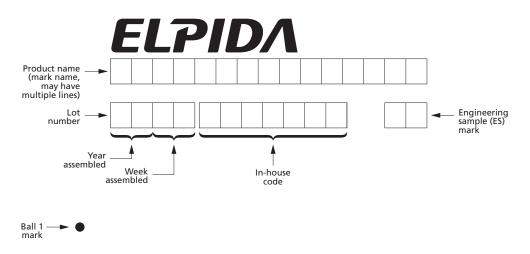
Figure 2: SOP2/W-PDFN/BGA/LGA Abbreviated Component Mark



Notes: 1. If the "MT" and "dot" are both present, ball 1 or lead 1 are identified by the "dot."

2. For BGA packages, the scribe and ball 1 or lead 1 indicator may swap positions if the package is wider than its length. The scribe and ball 1 or lead 1 indicator will always be marked along the short side of the component.

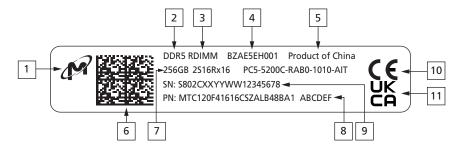
Figure 3: Legacy BGA Component with Elpida Part Mark



## **Module Label Data and Examples**

Labels used for module production have standard requirements for each line printed on the label, but can vary by type (see Figure 4 through Figure 8). In the following examples, Figure 6 is used as the standard label. Micron's module label content and format conform to JEDEC label specifications.

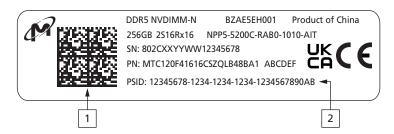
Figure 4: DDR5 LRDIMM, RDIMM, UDIMM and SODIMM DRAM Module Label Content



- 1. Micron logo
- 2. DRAM technology
- 3. Module DIMM type
- 4. Module build lot ID
- 5. Module assembly country of origin; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxx" for products of other origins
- 6. 2D barcode (see JEDEC DDR5 DIMM Label Specification)
  - (L) technical details (S) serial number (P) part number
- 7. JEDEC technical details (see JEDEC DDR5 DIMM Label Specification):
  - 7a. Module capacity, ranks, and number of data lines per DRAM device (256GB 2Sx16 shown)
  - 7b. DRAM technology (PC5 shown)
  - 7c. Module speed bin (5200C shown)
  - 7d. Module type, reference raw card and revision (RAB0 shown)
  - 7e. JEDEC SPD revision (1010 shown)
- 8. Micron DRAM module marketing part number
  - 8a. A process code is printed after the last character of module part numbers (ABCDEF shown; see Table 5)
  - 8b. For more information about module part numbering, see Module Part Numbering Systems on micron.com
- 9. JEDEC serial number (see JEDEC DDR5 DIMM Label Specification)
  - 9a. Data identifier, S (constant on all modules)
  - 9b. Micron's JEDEC manufacturer code, 802C (constant on all modules)
  - 9c. Manufacturing location (two characters, variable—see Table 6)
  - 9d. Date code (four characters: YYWW)
  - 9e. Module serial number (eight characters, unique to each module)
- 10. The European Regulatory Requirement mark (may or may not be present on a particular module label)

11. The UK Regulatory Requirement mark (may or may not be present on a particular module label)

Figure 5: DDR5 NVDIMM Additional Label Content

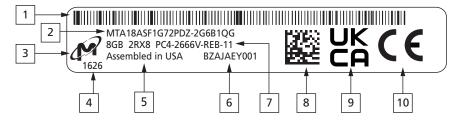


Micron's NVDIMM label has content not included on the standard label. This additional content is described below.

#### Key note definitions:

- 1. 2D barcode (see JEDEC DDR5 DIMM Label Specification)
  - (L) technical details (S) serial number (P) part number or
  - (L) technical details (S) serial number (P) part number (K) psid for modules supporting self-encryption
- 2. Physical Security ID

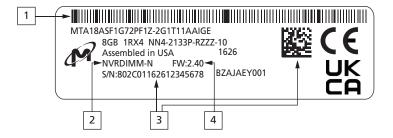
Figure 6: DDR4/DDR3 LRDIMM, RDIMM, UDIMM and SODIMM DRAM Module Label Content



- 1. Code 128 subset B bar code (per ISO/IEC 15417:2007) of Micron part number/date code (YWW) with a space separator between the data. Example: MT18ASF1672PDZ-2G6B1 626
- 2. Micron DRAM module marketing part number
  - 2a. A process code is printed after the last character of RDIMM, LRDIMM, NVDIMM, and ECC UDIMM/SODIMM module part numbers (QG shown; see Tables 1–3)
  - 2b. The process code for ECC UDIMM and SODIMM labels differ slightly as shown in Figure 8. Labels on UDIMMs and SODIMMs without ECC do not have a process code appended to the part number.
  - 2c. For more information about module part numbering, see Module Part Numbering Systems on micron.com
- 3. Micron logo
- 4. Module date code, four characters (YYWW)
- 5. Module assembly country of origin; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxxx" for products of other origins

- 6. Module build lot ID
- 7. DDR4 JEDEC label text (see JEDEC document Module 4.20.28)
  - 7a. Module capacity, ranks, and number of data lines per DRAM device (8GB 2RX8 shown)
  - 7b. DRAM technology (PC4 shown)
  - 7c. Module speed bin (2666V shown)
  - 7d. Module type, reference raw card and revision (REB shown)
  - 7e. JEDEC SPD revision (11 shown)
- 8. 2D barcode Encoded data string (per ISO/IEC 15426-2:2005)
  - 8a. Data identifier, S (constant on all modules)
  - 8b. Micron's JEDEC manufacturer code, 802C (constant on all modules)
  - 8c. Manufacturing location, two characters, variable (see Table 6)
  - 8d. Datecode, four characters (YYWW)
  - 8e. Module serial number, eight characters, unique to each module
- 9. The UK Regulatory Requirement mark (may or may not be present on a particular module label)
- 10. The European Regulatory Requirement mark (may or may not be present on a particular module label)

Figure 7: DDR4/DDR3 NVDIMM Additional Label Content

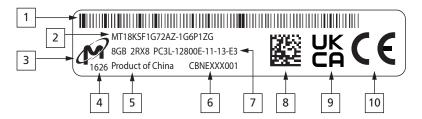


Micron's NVDIMM label has content not included on the standard label. This additional content is described below.

- 1. The process code on the NVDIMM label includes a third character (E shown) that identifies the multiplexer (MUX) vendor and device ID (See Table 4)
- 2. JEDEC hybrid memory module type; function designators:
  - N = Persistent
  - F = Block
  - P = Combined
- 3. 2D barcode and human-readable text Encoded data string (per ISO/IEC 15426-2:2005)
  - 3a. Data identifier, S (constant on all modules), applies only to barcode area
  - 3b. Micron's JEDEC manufacturer code, 802C (constant on all modules)
  - 3c. Manufacturing location, two characters, variable (see Table 6)
  - 3d. Datecode, four characters (YYWW)
  - 3e. Module serial number, eight characters, unique to each module
- 4. Firmware revision



#### Figure 8: DDR4/DDR3 ECC UDIMM/SODIMM Label Example



### Key note definitions:

- 1. Code 128 subset B bar code (per ISO/IEC 15417:2007) of Micron part number/date code (YWW) with a space separator between the data
- 2. Micron DRAM module marketing part number, which has a two-character process code printed after the last character
  - 2a. The first character of the process code, Z, is a place holder that means there is no register on the module
  - 2b. The second character, G in this case, identifies the temperature sensor manufacturer and device version
  - For more information about module part numbering, see Module Part Numbering Systems on micron.com
- 3. Micron logo
- 4. Module date code, four characters (YYWW)
- 5. Module assembly country of origin; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxxx" for products of other origins
- 6. Module build lot ID
- 7. DDR3 JEDEC label text (See JEDEC Doc. Module 4.20.20)
  - 7a. Module capacity (8GB shown)
  - 7b. Module ranks and number of data lines per DRAM device (2RX8 shown)
  - 7c. DRAM technology and supply voltage (V<sub>DD</sub>; PC3L shown)
  - 7d. Module speed bin (12800 shown)
  - 7e. Module type (E shown)
  - 7f. CAS Latency, in clocks (11 shown)
  - 7g. JEDEC SPD revision (13 shown)
  - 7h. Reference raw card and revision (E3 shown)
- 8. 2D barcode Encoded data string (per ISO/IEC 15426-2:2005)
  - 8a. Data identifier, S (constant on all modules)
  - 8b. Micron's JEDEC manufacturer code, 802C (constant on all modules)
  - 8c. Manufacturing location, two characters, variable (see Table 6)
  - 8d. Datecode, four characters (YYWW)
  - 8e. Module serial number, eight characters, unique to each module
- 9. The UK Regulatory Requirement mark (may or may not be present on a particular module label)
- 10. The European Regulatory Requirement mark (may or may not be present on a particular module label)

Non-ECC UDIMM and SODIMM module labels do not have a process code ID printed on the label.

### **Process Codes**

The following tables provide the process code options for DDR3 register, DDR4 register clock driver (RCD) and temperature sensor/EEPROM devices.

DDR5 information to be provided at a later date.

**Table 1: DDR3 Process Code Options** 

Register Vendor	Register Vendor ID (First Character)	Register Vendor Part Number	Temp Sensor/ EEPROM Vendor	Temp Sensor/ EEPROM Vendor ID (Second Character)	Temp Sensor/ EEPROM Vendor Part Number
IDT	D	SSTE32882HLBAKG8	ST Micro	E	STTS2002B2DN3F
	Н	SSTE32882KA1AKG8	Microchip	F	MCP98243T-BE/ MNYAA
	M	SSTE32882KB1AKG8	NXP	G	SE97BTP-547
Inphi	А	INSSTE32882LV-GS02			
	F	INSSTE32882UV-GS02			
	K	INSSTE32882XV-GS02			
Montage	N	M88SSTE32882H0-T			
TI	В	SN74SSQEA32882ZALR			
	G	SN74SSQEB32882ZALR			
	L	SN74SSQEC32882ZALR			
None	Z	_			

## Table 2: DDR4 RDIMM, NVDIMM<sup>1</sup> Process Code Options

RCD Vendor	RCD Vendor ID (First Character)	RCD Vendor Part Number	Temp Sensor/ EEPROM Vendor	Temp Sensor/ EEPROM Vendor ID (Second Character)	Temp Sensor/ EEPROM Vendor Part Number
IDT	I	4RCD0124KC0ATG	IDT	G	TSE2004GB2B0NCG8
	S	4RCD0229KB1ATG8	ST Micro	I	STTS2004B2DN3F
	V	4RCD0232KC1ATG8	Microchip	K	MCP98244T-BE/MNY
Inphi	K	IDDR4RCD-GS02			
	R	IDDR4RCD2-GS01			
Rambus	A (NVDIMM)	IDDR4NVRCD2-GS02			
	U	IDDR4RCD2-GS03			
Montage	Н	M88DDR4RCD01B1-T			
	M	M88DDR4RCD01C0-T			
	Q	M88DDR4RCD02A0-T			
	Т	M88DR4RCD02PH1			
TI	J	CAB4AZNRR			
None	Z	-			

Notes: 1. DDR4 NVDIMMs' process code includes a third character that identifies the multiplexer (MUX) vendor and device version (see Table 4).

Table 3: DDR4 LRDIMM Process Code Options

RCD/Data Buffer Vendor	RCD/Data Buffer Vendor ID (First Character)	RCD Vendor Part Number Data Buffer Vendor Part Number	Temp Sensor/ EEPROM Vendor	Temp Sensor/ EEPROM Vendor ID (Second Character)	Temp Sensor/ EEPROM Vendor Part Number
IDT	I	4RCD0124KC0ATG 4DB0124KB1AVG53	IDT	G	TSE2004GB2B0NCG8
	Р	4RCD0124KC0ATG 4DB0226KA3AVG	ST Micro	I	STTS2004B2DN3F
	S	4RCD0229KB1ATG8 4DB0226KB0AVG8	Microchip	К	MCP98244T-BE/MNY
	V	4RCD0232KC1ATG8 4DB0232KC2AVG8			
Montage	Н	M88DDR4RCD01B1-T M88DDR4DB01A1-T			
	М	M88DDR4RCD01C0-T M88DDR4DB01B0-T			
	Q	M88DDR4RCD02A0-T M88DDR4DB02A1-T			
	Т	M88DR4RCD02PH1 M88DR4DB02PH2-T			
None	Z	_			

### **Table 4: DDR4 NVDIMM Process Code Third Character Options**

MUX Vendor	<b>Process Code Character</b>	Vendor Part Number
TI	D	TS3DDR4000ZBAR
NXP	E	CBTV24DD12

### **Table 5: DDR5 Process Code Options**

Note: DDR5 process code information is in development. Contact your Micron account team with any questions.

**Table 6: Module Manufacturing Locations** 

Location	ID Number	Hexadecimal Value
SIG (USA)	1	0x01
MTB (Taiwan)	2	0x02
MNG (Malaysia)	5	0x05
MMP (Malaysia)	6	0x06
SING (Singapore)	8	0x08
MXA (China)	15	0x0F
TSMT (Taiwan)	37	0x25



## **SSD Label Information**

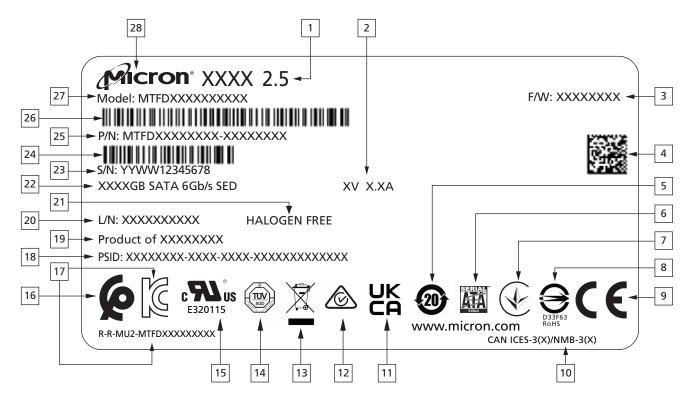
Figures 9 through 12 show representative label structures for our SSD products. The figures have designated "key notes" that outline the details of each particular item on the label.

Micron has added a manufacturing identification (MID) label to all SSD products. This 2D barcode label is for Micron internal use only.

Figure 9: SSD MID Label



Figure 10: Micron Standard 2.5 SSD Label Structure



- 1. Market segment, form factor, product and FIPS security (if applicable). Example:  $1100\,2.5\,\rm SSD\,FIPS\,140\text{--}2\,L2$
- 2. The device's voltage level with its related amperes at normal operation (defined by Micron QRA)
- 3. Drive firmware revision number
- 4. PSID data matrix (2D) barcode
- 5. Reserved for the official China Restriction of Hazardous Substances mark
  - This device must meet the standards of China RoHS to enable the 20 year indication of the RoHS mark
- 6. Reserved for the official mark based on the drive interface (SATA, SAS, and so on)



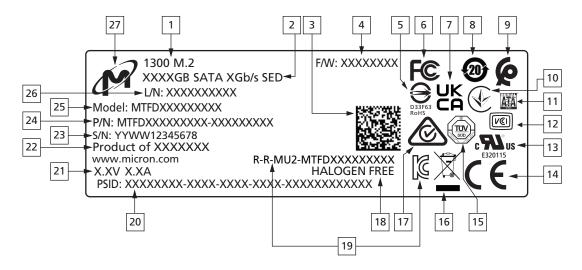
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- 7. Reserved for the official Ukraine mark
- 8. Reserved for the official Taiwan Bureau of Standards Metrology and Inspection (BSMI) mark
  - In addition, the certification number assigned to this Micron product shall be listed below the mark in a legible font
- 9. Reserved for the official European Regulatory Requirement mark
- 10. Reserved for the official Industry of Canada certification number
- 11. Reserved for official UK Regulatory Requirement mark
- 12. Reserved for the official RCM (Australian) mark
- 13. Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark
- 14. Reserved for the official TUV mark
- 15. Reserved for the official Underwriters Laboratories (UL) mark
- 16. Reserved for the official Morocco mark.
- 17. Reserved for the official Korean Certification (KC) mark
  In addition, the certification number assigned to this Micron product shall be listed near the mark in a legible font
- 18. PSID alphanumeric code
- 19. Country where the device is assembled, written in English; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxxx" for products of other origins
- 20. Lot number for tracking the drive's manufacturing data
  - 20a. This is listed as xxyyyyyzzz
  - 20b. xx = 2 digits to denote manufacturing site
  - 20c. yyyyy = 5 digits to denote the kit number (randomly generated)
  - 20d. zzz = 3 digits denoting a sublot size (to provide greater resolution of manufacturing information)
- 21. Halogen-free mark indicating that the drive meets the IPC low-halogen requirements
- 22. Drive's capacity, product type, maximum interface rate, and security feature set (SED, Opal 2, FIPS, and so on, if applicable); Example: 512GB SATA 6 Gb/s SED
- 23. Drive serial number
  - 23a. Format: 12 characters: YYWWXXXXXXX
    - YY is the current year
    - WW is the current Micron workweek
    - XXXXXXX is an eight digit hex (base 16 0–9. A–F) serial number
- 24. Drive serial number bar code for item #23 data (follows the Code 128 standard)
- 25. Drive part number
- 26. Drive part number bar code for item #25 data (follows the Code 128 standard)
- 27. Micron model number
- 28. Micron logo

Not shown is the worldwide name assigned to Micron (as defined by IEEE), which may or may not be present on the label. WWN: 500A0751XXXXXXXX



Figure 11: Micron Standard M.2 SSD Label Structure



- 1. Market segment, form factor and product and FIPS security (if applicable); Example: 1100 M.2 SSDFIPS 140-2 L2
- 2. Drive's capacity, product type, maximum interface rate, and security feature set (SED, Opal 2, FIPS, and so on, if applicable); Example: 512GB SATA 6Gb/s SED
- 3. Data matrix (2D) barcode containing the drive serial number, drive part number, and PSID (if applicable for a security feature enabled drive)
- 4. Drive firmware revision number
- Reserved for the official Taiwan Bureau of Standards Metrology and Inspection (BSMI) mark
   In addition, the certification number assigned to this Micron product shall be listed below the mark in a legible font
- 6. Reserved for the official USA Federal Communications Commission (FCC) mark
- 7. Reserved for official UK Regulatory Requirement mark
- 8. Reserved for the official China Restriction of Hazardous Substances mark
  - This device must meet the standards of China RoHS to enable the 20 year indication of the RoHS mark
- 9. Reserved for the official Morocco mark
- 10. Reserved for the official Ukraine mark
- 11. Reserved for the official mark based on the drive interface (SATA, SAS, and so on)
- 12. Reserved for the official Japan VCCI mark
- 13. Reserved for the official Underwriters Laboratories (UL) mark
- 14. Reserved for the official European Regulatory Requirement mark
- 15. Reserved for the official TUV mark
- 16. Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark
- 17. Reserved for the official RCM (Australian) mark
- 18. Halogen-free mark indicating that the drive meets the IPC low-halogen requirements
- 19. Reserved for the official Korean Certification (KC) mark.
  In addition, the certification number assigned to this Micron product shall be listed near the mark in a legible font



# CSN-11: Product Marks/Product and Packaging Labels SSD Label Information

- 20. PSID alphanumeric code
- 21. The device's voltage level with its related amperes at normal operation (defined by Micron QRA)
- 22. Country where the device is assembled, written in English; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxxx" for products of other origins
- 23. Drive serial number; Format: 12 characters: YYWWXXXXXXX

YY is the current year

WW is the current Micron workweek

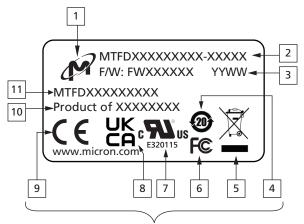
XXXXXXX is an eight digit hex (base 16 0-9. A-F) serial number

- 24. Drive part number
- 25. Micron model number
- 26. Lot number for tracking the drive's manufacturing data
  - 26a. This is listed as xxyyyyyzzz
  - 26b. xx = 2 digits to denote manufacturing site
  - 26c. yyyyy = 5 digits to denote the kit number (randomly generated)
  - 26d. zzz = 3 digits denoting a sublot size (to provide greater resolution of manufacturing information)
- 27. Micron logo

Not shown is the worldwide name assigned to Micron (as defined by IEEE), which may or may not be present on the label. WWN: 500A0751XXXXXXXX



#### Figure 12: Embedded USB Label Structure



Labels for engineering samples replace these logos with text: ENGINEERING SAMPLE.

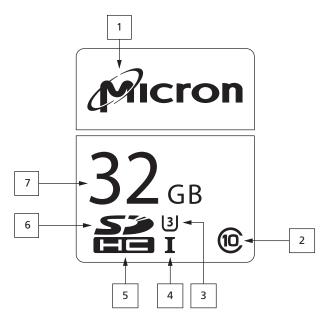
- 1. Micron logo
- 2. USB part number
- 3. Firmware revision, lot ID for tracking the USB's manufacturing data (if applicable) and date code 4- or six-digit; Format: YYWW or YYYYWW YY or YYYY is the current year
  - WW is the current Micron workweek
- 4. Reserved for the official China Restriction of Hazardous Substances mark
  - This device must meet the standards of China RoHS to enable the 20 year indication of the RoHS mark
- 5. Reserved for the official European Waste Electrical and Electronics Equipment (WEEE) mark
- 6. Reserved for the official USA Federal Communications Commission (FCC) mark
- 7. Reserved for the official Underwriters Laboratories (UL) mark
- 8. Reserved for official UK Regulatory Requirement mark
- 9. Reserved for the official European Regulatory Requirement mark
- 10. Country where the device is assembled, written in English; Micron uses:
  - "Made in Taiwan" for Taiwan origin product
  - "Assembled in USA" for US origin product
  - "Product of xxxx" for products of other origins
- 11. Lead free statement (if applicable), Micron model number and density (if applicable); Example: MTFDXXXXXXXX



## **SD and microSD Label Information**

Figure 13 shows a representative front label structure for our SD and microSD products. Figure 15 shows the backside markings. The figures have designated "key notes" that outline the details of each particular item.

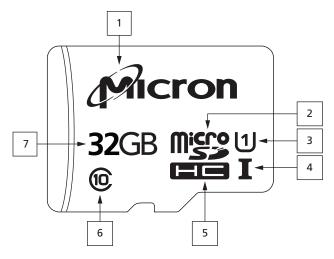
Figure 13: Micron SD Label Structure



- 1. Micron logo
- 2. Speed class rating
- 3. UHS speed class rating
- 4. UHS Rating
- 5. Type
- 6. Form factor
- 7. Capacity



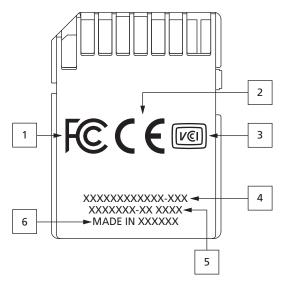
Figure 14: Micron microSD Label Structure



- 1. Micron logo
- 2. Form factor
- 3. UHS speed class rating
- 4. UHS Rating
- 5. Type
- 6. Speed class rating
- 7. Capacity



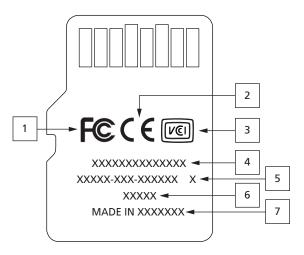
Figure 15: Micron SD Backside Markings



- 1. Reserved for the official USA Federal Communications Commission (FCC) mark
- 2. Reserved for the official European Regulatory Requirement mark
- 3. Reserved for the official Japan VCCI mark
- 4. Micron part number
- 5. Lot number and date code
- 6. Country of origin



Figure 16: Micron microSD Backside Markings



- 1. Reserved for the official USA Federal Communications Commission (FCC) mark
- 2. Reserved for the official European Regulatory Requirement mark
- 3. Reserved for the official Japan VCCI mark
- 4. Manufacturing lot number
- 5. Internal assembly part number
- 6. Date code
- 7. Country of origin

## **Micron Packaging Labels**

Micron uses various packaging labels to enable quick identification of packaged contents, provide a simple order verification method, and indicate inner-package moisture levels. All labels are manufactured from matte-coated facestock or synthetic paper and contain acrylic- or water-based adhesive. See CSN-16 for complete information on all Micron packaging materials, including recyclable materials.

#### **Master Container Labels**

For all shipments, Micron uses standard bar code labels that conform to EIA Standard 556. The bar code labels enable customers to scan Micron containers for quick order verification. Figure 18 on page 23 shows an example of the standard bar code label used on master containers. Each box also carries its own bar code label (see the Individual Packaging Labels section).

#### **Bar Code Information**

The following information appears on the master container labels only:

- (3S/4S) PKG ID: Invoice or packing slip number
- (1P) SPLR PROD ID: Reserved for individual customer requirements
- (Q) QUANTITY: Number of parts in master container
- (K) TRANS ID: Customer purchase order number
- (P) CUST PART NO: If a customer part number is not designated, the Micron part number will be printed
- (4L) Origin: The country in which the product was made

Figure 17: Standard Master Container Shipping Label

Figure 18: Standard Master Container Bar Code Label

(3S) PKG ID: 417904839			Ship_To_Name Address City, ST ZIP C Country		
(Q) QUANTITY: 2500	(4L) Origin	TW	PACKAGE COUNT: 1 OF 1 25.9 x 15.0 x 27.9 In 66.3 x 38.6 x 71.4 Cm	Micron Techi 1160 Exchan Boise ID 837 USA	ge, Doc 1D
(1P)SPLR PROD ID: MT41	(256M16TW				
(K) TRANS ID: 4505469156					
(P) CUST PART NO: 256-	4839				
PACKAGE WEIGHT 2.7 LB	S / 1.2 KGS			SHIP DATE	03/20/2017

Notes: 1. For the "CUST PART NO:" field, if no CPN is provided by the customer, the Micron part number will be displayed.

#### **Additional Label Information**

The following information appears in the upper right and bottom portion of the master container labels and may differ slightly depending on whether the label has a (3S) or (4S) PKG ID:

- Ship-to name: Customer's name and ship-to address
- Ship-from name: Micron's name and address
- PACKAGE COUNT (3S): Master container package count, or TOTAL COUNT (4S): Master container package count
  - (3S) label includes master container size in inches and centimeters
- PACKAGE WEIGHT (3S): Package weight in pounds and kilograms, or TOTAL WEIGHT (4S): Master container weight in pounds and kilograms
- SHIP DATE: Date the product leaves the factory

# **Individual Packaging Labels**

For quick order verification, Micron attaches a standard bar code label and inner packing container label on the inner packing container. Additionally, the moisture-barrier or static-shielding bag has a moisture sensitivity (MST) label and a standard bar code label attached to the front. If ordering in tape and reel, the tape-and-reel carrier will have a standard bar code label attached. Figure 19 on page 24 shows an example of the standard bar code label, Figure 20 on page 24 shows an example of Micron's inner packing container label, and Figure 22 on page 25 shows an example of Micron's MST label. Refer to Figure 23 on page 25 for approximate placement of these labels on Micron's moisture-barrier and static-shielding bags.



#### Figure 19: Standard Bar Code Label

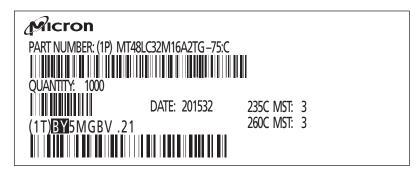


Figure 20, Micron's Inner Packing Container Label, indicates the RoHS status of compliance with either RoHS or RoHS and HF (for those products that are also free of halogens). This space will be blank on labels for containers that hold parts with lead. Also, an asterisk (\*) at the end of the date code indicates that the container holds a mix of product from more than one date; the date shown is that of the oldest product in the container. The "VID..." text is printed on the label as applicable for specific products.

Figure 20: Micron's Inner Packing Container Label

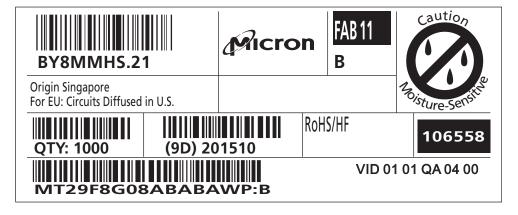


Figure 21: Micron's Inner Packing Container Label for Modules and SSDs



Notes:

- 1. The European Regulatory Requirement mark may or may not be present on a particular inner packing label.
- 2. Some module product labels may include additional characters after the Micron marketing part number. For more information, see the Module Label Data section.



Figure 22: Micron's Moisture Sensitivity (MST) Label

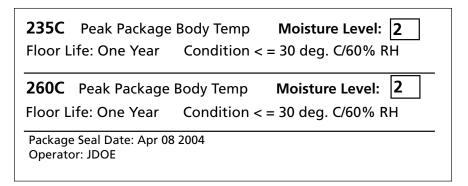
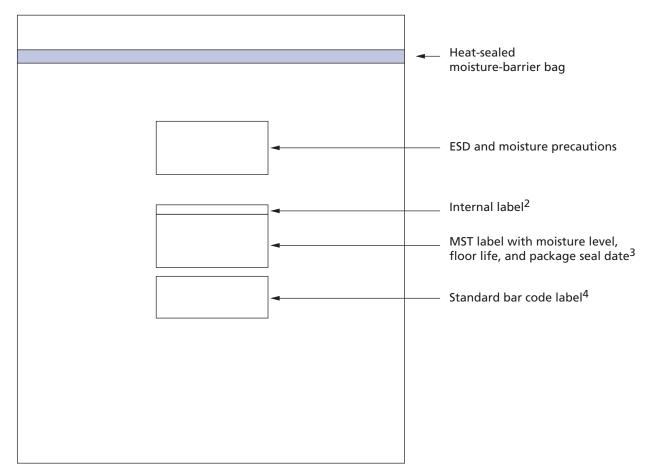


Figure 23: Labeling on Moisture-Barrier and Static-Shielding Bags<sup>1</sup>



Notes:

- 1. This figure indicates the approximate locations only of the various labels.
- 2. Internal labels are applicable to tube and tray shipments only and may or may not be present on every bag.
- 3. See Figure 22.
- 4. See Figure 19.

# CSN-11: Product Marks/Product and Packaging Labels Revision History

# **Revision History**

Rev. AN	
	Added Figure 4, Figure 5
	• Updated Figure 6, Figure 7, Figure 8, Figure 21
	Added Table 5
	<ul> <li>Removed figures: 2.5-inch Label Structure - M5XX(DC/IT)/M600 and</li> </ul>
	mSATA Label Structure - M6XX and mSATA Label Structure - M6XX
Rev. AM	9/19
	Updated Table 5
Rev AL	4/19
TCV-TEL	• Updated country of origin key note text for Figures 4, 6, 8, 9, 10 and 11
	<ul> <li>Added "Reserved for the official Industry of Canada certification number" to Figure 8</li> </ul>
	key notes
	Updated Figure 18 1P and P fields and added note 1
	Updated Figure 21 and added note 2
	-
Rev. AK	11/18
	Updated Figure 5 and notes
	• Updated Table 5
	• Updated Figures 8, 10, 18 and 20
Rev. AJ	8/18
	Added note 2 to Figure 2
	Added the official Morocco mark to Figures 8 and 10
	Updated Figure 20
Dov. AI	3/18
Rev. AI	• Updated Tables 2 and 3
	• Opdated Tables 2 and 5
Rev. AH	12/17
	<ul> <li>Added SD and microSD Label Information</li> </ul>
Rev AG	10/17
1001110	• Updated Figures 8–11
Rev. AF	7/17
	Updated Figure 16
Rev. AE	5/17
	<ul> <li>Updated Data matrix (2D) barcode description for Figure 10</li> </ul>
	Deleted Figures 11 and 12 (EoL product)
n	-
Rev. AD	3/17
	<ul> <li>Updated Figure 16 and the following explanatory paragraphs</li> </ul>
Rev. AC	11/16
	Added Table of Contents and List of Figures
	Updated Figures 1 and 2
	• Updated and expanded Module Label Data and Examples (Added Process Codes )
	Updated all SSD labels and key note definitions
	Updated Figures 15 through 19



# CSN-11: Product Marks/Product and Packaging Labels Revision History

Rev. AB	5/16
	<ul> <li>Added DDR3, DDR4 Process Code Reference section</li> </ul>
Rev. AA	3/16
1.0111111111111111111111111111111111111	• Corrected typo in Note 3 of Figure 4
	• Updated Figures 12, 16 and added new Figure 17. 1/16
Rev 7	
nev. Z	Updated module label explanation and notes.
	Added M6xx SSD labels.
	<ul> <li>Deleted links to specific SSD label figures under SSD Label Information.</li> </ul>
	<ul> <li>Added Table of Contents and List of Figures.</li> </ul>
	Updated Figure 2 title.
D V	
Rev. Y	
	Added SSD MID label.
Rev. X	5/15
	• Updated Figure 4.
	• Updated Figure 23.
Rev. W	5/15
	• Added Note 2 to Figure 4.
Rev V	
1.0	Updated information on page one.
	<ul> <li>Added information for legacy components with Elpida part marks.</li> </ul>
	Added DC and IT mark to M5xx SSD label title.
	Added 2.5in P420m label information.
D II	
Rev. U	
	• Added M.2 M510/M550 label.
Rev. T	1/14
	• Added "/date code (YWW)" to Line 1 of the Module Label Information section.
Rev. S	12/13
	<ul> <li>Added European Regulatory Requirement logo and note to Figures 3 and 20.</li> </ul>
	• Corrected numbering on pages 4 and 5.
Rev. R	8/13
Nev. N	• Corrected label titles for Figure 11, Figure 16, and Figure 17.
Rev. R	
	Added new SSD labels.
Rev. Q	5/13
	Added new SSD labels.
Rev. P	
	Updated Inner Packing Container and Standard Master Container Shipping labels.
	• Corrected note references for Figure 15.



# CSN-11: Product Marks/Product and Packaging Labels Revision History

Rev. O	6/12
	Added Microdisplay panel label.
Rev. N	3/12
	<ul> <li>Added the Embedded USB label.</li> </ul>
Rev. M	2/12
	<ul> <li>Added the SSD mSATA label.</li> </ul>
Rev L	2/12
ICV. L	• Corrected references in Figure 12.
Dow V	
Rev. K	Updated security feature set to Figure 6 and it's notes.
Dog I	
Kev. J	• Added aliases to the links for the part numbering guides and FBGA date codes, and
	the FBGA Part Marking Decoder.
	Added specific date code information.
	Updated country codes.
	Added SSD C400 label information.
Roy H	
100.11	Added date code information to the text for Figure 9
Dov. C	Ü
Rev. G	• Corrected typo
D	71
Rev. F	• Added SSD product labels
	<ul> <li>Added packaging label information from CSN-16</li> </ul>
Rev. E	
	Updated template     Undated Figure 3. "Module Lebel"
	• Updated Figure 3, "Module Label"
Rev. D	
	Added Korea to note 1 country codes     Hadded and reviewed Figure 2
	<ul> <li>Updated and renamed Figure 2</li> <li>Deleted Figure 3, "DDR2/GDDR3 FBGA Abbreviated Component Mark"</li> </ul>
	•
Rev. C	
	<ul> <li>Added Taiwan to note 1 country codes</li> </ul>
Rev. 12/9/05	
	<ul> <li>Added logo information to Figure 1 on page 5 and Figure 2 on page 6</li> </ul>
Rev. 2/14/05	
	Added China to note 1 country code





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