

## N3292/N9H26 Storage Support List

Application Note for N3292/N9H26 Series

### Document Information

|                 |  |
|-----------------|--|
| <b>Abstract</b> | This document lists N3292/N9H26 storage support devices. |
| <b>Apply to</b> | N3292/N9H26 Series.                                      |

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# 1 SD/SDHC/SDXC

**Note:** The default file system for SDXC card is exFAT. The N3292/N9H26 BSP does not support it. Please format SDXC card to FAT file system before using it on N3292/N9H26 BSP.

| Brand Name | Type      | Density | Test Result     |
|------------|-----------|---------|-----------------|
| A-DATA     | SD        | 1 GB    | Pass            |
| A-DATA     | SD        | 2 GB    | Pass            |
| A-DATA     | SDHC      | 8 GB    | Pass            |
| A-DATA     | MicroSDHC | 32 GB   | Pass            |
| Apacer     | SD        | 128 MB  | Pass            |
| Apacer     | SD        | 1 GB    | Pass            |
| Apacer     | SD        | 2 GB    | Pass            |
| Apacer     | SDHC      | 4 GB    | Pass            |
| Apacer     | SDXC      | 64 GB   | Pass (FAT only) |
| Apotop     | SDHC      | 8 GB    | Pass            |
| Gigaston   | SDHC      | 16 GB   | Pass            |
| Kingmax    | SD        | 64 MB   | Pass            |
| Kingstone  | SD        | 128 MB  | Pass            |
| Kingstone  | SD        | 1 GB    | Pass            |
| Kingstone  | MicroSD   | 1 GB    | Pass            |
| Kingstone  | SD        | 2 GB    | Pass            |
| Kingstone  | SDHC      | 4 GB    | Pass            |
| Kingstone  | SDHC      | 8 GB    | Pass            |
| Kingstone  | SDHC      | 32 GB   | Pass            |
| Kingstone  | SDXC      | 128 GB  | Pass (FAT only) |
| Mio        | SD        | 64 MB   | Pass            |
| PQI        | SD        | 256 MB  | Pass            |
| Pretec     | SDHC      | 32 GB   | Pass            |
| RiData     | SD        | 128 MB  | Pass            |
| RiData     | SD        | 2 GB    | Pass            |
| SanDisk    | SD        | 64 MB   | Pass            |
| SanDisk    | SD        | 256 MB  | Pass            |
| SanDisk    | SD        | 512 MB  | Pass            |
| SanDisk    | MicroSD   | 1 GB    | Pass            |
| SanDisk    | SD        | 2 GB    | Pass            |
| SanDisk    | MicroSD   | 2 GB    | Pass            |

| Brand Name | Type      | Density | Test Result     |
|------------|-----------|---------|-----------------|
| SanDisk    | SDHC      | 4 GB    | Pass            |
| SanDisk    | MicroSDHC | 4 GB    | Pass            |
| SanDisk    | MicroSDHC | 8 GB    | Pass            |
| Sony       | SDHC      | 8 GB    | Pass            |
| SP         | SDHC      | 16 GB   | Pass            |
| Tcell      | SDHC      | 16 GB   | Pass            |
| Toshiba    | SD        | 256 MB  | Pass            |
| Toshiba    | MicroSD   | 1 GB    | Pass            |
| Toshiba    | SDHC      | 8 GB    | Pass            |
| Toshiba    | SDHC      | 16 GB   | Pass            |
| Toshiba    | SDXC      | 256 GB  | Pass (FAT only) |
| Transcend  | SD        | 256 MB  | Pass            |
| Transcend  | SD        | 512 MB  | Pass            |
| Transcend  | SD        | 1 GB    | Pass            |
| Transcend  | SD        | 2 GB    | Pass            |
| Transcend  | SDHC      | 4 GB    | Pass            |
| Transcend  | MicroSDHC | 4 GB    | Pass            |
| Transcend  | SDHC      | 8 GB    | Pass            |
| Transcend  | SDHC      | 16 GB   | Pass            |

## 2 NAND Flash

**Note:** D/A: Datasheet applicable

**Note:** N/A (xx): Not applicable since (xx)

For example, "N/A (MLC)" in "Test Result for IBR Booting" field means that MLC NAND Flash is not applicable for booting since Read Disturb issue.

| Manufacturer | Part Number  | Type | Page Size (Bytes) | Density | Test Result for Data Access | Test Result for IBR Booting |
|--------------|--------------|------|-------------------|---------|-----------------------------|-----------------------------|
| Samsung      | K9F5608U0D   | SLC  | 512 + 16          | 32 MB   | Pass                        | Pass                        |
| Samsung      | K9F1208U0C   | SLC  | 512 + 16          | 64 MB   | Pass                        | Pass                        |
| Samsung      | K9F1G08U0B   | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Samsung      | K9F1G08U0D   | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Samsung      | K9F1G08U0E   | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Samsung      | K9F1G08U0F   | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Samsung      | K9F2G08U0B   | SLC  | 2K + 64           | 256 MB  | Pass                        | Pass                        |
| Samsung      | K9F2G08U0D   | SLC  | 2K + 64           | 256 MB  | D/A                         | D/A                         |
| Samsung      | K9F4G08U0A   | SLC  | 2K + 64           | 512 MB  | D/A                         | D/A                         |
| Samsung      | K9F4G08U0F   | SLC  | 2K + 64           | 512 MB  | D/A                         | D/A                         |
| Samsung      | K9WAG08U1D   | SLC  | 2K + 64           | 512 MB  | Pass                        | Pass                        |
| Samsung      | K9K8G08U0F   | SLC  | 2K + 64           | 1 GB    | D/A                         | D/A                         |
| Samsung      | K9G8G08U0A   | MLC  | 2K + 64           | 1 GB    | Pass                        | N/A (MLC)                   |
| Samsung      | K9G8G08U0M   | MLC  | 2K + 64           | 1 GB    | Pass                        | N/A (MLC)                   |
| Samsung      | K9GAG08U0E   | MLC  | 8K + 436          | 2 GB    | D/A                         | N/A (MLC)                   |
| Samsung      | K9HBG08U1M   | MLC  | 2K + 64           | 2 GB    | Pass                        | N/A (MLC)                   |
| Samsung      | K9HCG08U1E   | MLC  | 8K + 436          | 2 GB    | D/A                         | N/A (MLC)                   |
| Samsung      | K9LBG08U0E   | MLC  | 8K + 436          | 2 GB    | D/A                         | N/A (MLC)                   |
| Hynix        | H27U518S2CTP | SLC  | 512B              | 64 MB   | Pass                        | Pass                        |
| Hynix        | HY27US08121A | SLC  | 512B              | 64 MB   | D/A                         | D/A                         |
| Hynix        | HY27US08121M | SLC  | 512B              | 64 MB   | D/A                         | D/A                         |
| Hynix        | H27U1G8F2BTR | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Hynix        | HY27UF081G2A | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Hynix        | HY27UF084G2B | SLC  | 2K + 64           | 512 MB  | Pass                        | Pass                        |
| Hynix        | HY27UT084G2A | MLC  | 2K + 64           | 512 MB  | Pass                        | N/A (MLC)                   |
| Hynix        | H27UAG8T2A   | MLC  | 4K + 224          | 2 GB    | Pass                        | N/A (MLC)                   |
| Hynix        | H27UAG8T2B   | MLC  | 8K + 448          | 2 GB    | Pass                        | N/A (MLC)                   |
| Hynix        | HY27UK08BGFM | SLC  | 2K + 64           | 4 GB    | D/A                         | D/A                         |

| Manufacturer | Part Number     | Type | Page Size (Bytes) | Density | Test Result for Data Access | Test Result for IBR Booting |
|--------------|-----------------|------|-------------------|---------|-----------------------------|-----------------------------|
| Hynix        | H27UBG8T2A      | MLC  | 8K + 448          | 4 GB    | D/A                         | N/A (MLC)                   |
| Hynix        | H27UBG8T2BTR    | MLC  | 8K + 640          | 4 GB    | N/A (ECC 40)                | N/A (ECC 40)                |
| Hynix        | H27UBG8T2CTR    | MLC  | 8K + 640          | 4 GB    | N/A (ECC 40)                | N/A (ECC 40)                |
| Hynix        | H27UCG8T2ATR    | MLC  | 8K + 640          | 8 GB    | N/A (ECC 40)                | N/A (ECC 40)                |
| Hynix        | H27UCG8T2BTR    | MLC  | 16K + 1280        | 8 GB    | N/A (ECC 40 & 16KB page)    | N/A (ECC 40 & 16 KB page)   |
| Micron       | MT29F1G08ABxDA  | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Micron       | MT29F1G08ABAEA  | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Micron       | MT29F1G08ABAFa  | SLC  | 2K + 128          | 128 MB  | N/A (built-in ECC)          | N/A (built-in ECC)          |
| Micron       | MT29F2G08ABAEA  | SLC  | 2K + 64           | 256 MB  | D/A                         | D/A                         |
| Micron       | MT29F4G08ABADA  | SLC  | 2K + 64           | 512 MB  | D/A                         | D/A                         |
| Micron       | MT29F4G08ABAEA  | SLC  | 4K + 224          | 512 MB  | Pass                        | Pass                        |
| Micron       | MT29F16G08CBABx | MLC  | 4K + 224          | 2 GB    | D/A                         | N/A (MLC)                   |
| Micron       | MT29F16G08CBACA | MLC  | 4K + 224          | 2 GB    | Pass                        | N/A (MLC)                   |
| Micron       | MT29F32G08CBACA | MLC  | 4K + 224          | 4 GB    | Pass                        | N/A (MLC)                   |
| Micron       | MT29F32G08CBADB | MLC  | 8K + 744          | 4 GB    | N/A (ECC 40)                | N/A (ECC 40)                |
| Toshiba      | TC58BVG0S3HTA00 | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Toshiba      | TC58DVG02D5TA00 | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Toshiba      | TC58NVG0S3ETA00 | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Toshiba      | TC58NVG0S3ETA0B | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Toshiba      | TC58NVG0S3HTA00 | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |
| Toshiba      | TC58NVG1S3ETA00 | SLC  | 2K + 64           | 256 MB  | Pass                        | Pass                        |
| Toshiba      | TC58NVG1S3HTA00 | SLC  | 2K + 128          | 256 MB  | Pass                        | Pass                        |
| Toshiba      | TC58NVG2S0HTA00 | SLC  | 4K + 256          | 512 MB  | D/A                         | D/A                         |
| Toshiba      | TC58DVG3S0ETA00 | SLC  | 4K + 128          | 1 GB    | Pass                        | Pass                        |
| Toshiba      | TC58NVG3S0FTA00 | SLC  | 4K + 232          | 1 GB    | Pass                        | Pass                        |
| Toshiba      | TC58NVG3D1DTG00 | MLC  | 4K + 218          | 1 GB    | Pass                        | N/A (MLC)                   |
| Toshiba      | TC58NVG4D2FTA00 | MLC  | 8K + 448          | 2 GB    | Pass                        | N/A (MLC)                   |
| ATO          | AFND1G08U3      | SLC  | 2K + 64           | 128 MB  | D/A                         | D/A                         |
| Eon          | EN27LN1G08      | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass                        |

| Manufacturer  | Part Number  | Type | Page Size (Bytes) | Density | Test Result for Data Access         | Test Result for IBR Booting         |
|---------------|--------------|------|-------------------|---------|-------------------------------------|-------------------------------------|
| Eon           | EN27LN2G08   | SLC  | 2K + 64           | 256 MB  | Pass                                | Pass                                |
| Eon           | EN27LN4G08   | SLC  | 2K + 64           | 512 MB  | Pass                                | Pass                                |
| ESMT          | F59L1G81A    | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| ESMT          | F59L1G81LA   | SLC  | 2K + 64           | 128 MB  | D/A                                 | D/A                                 |
| ESMT          | F59L2G81A    | SLC  | 2K + 64           | 256 MB  | Pass                                | Pass                                |
| ESMT          | F59L4G81A    | SLC  | 2K + 64           | 512 MB  | D/A                                 | D/A                                 |
| Maker Founder | MP4G08KAA    | SLC  | 2K + 64           | 512 MB  | D/A                                 | D/A                                 |
| Maker Founder | MP4G08JAA    | SLC  | 4K + 256          | 512 MB  | D/A                                 | D/A                                 |
| Maker Founder | MP8G08KAA    | SLC  | 2K + 64           | 1 GB    | D/A                                 | D/A                                 |
| Mira/Deutron  | PSU12A30BT   | SLC  | 2K + 64           | 64 MB   | D/A                                 | D/A                                 |
| Mira/Deutron  | PSU1GA30HT   | SLC  | 2K + 64           | 128 MB  | D/A                                 | D/A                                 |
| MXIC          | MX30LF1208AA | SLC  | 2K + 64           | 64 MB   | Pass                                | Pass                                |
| MXIC          | MX30LF1G08AA | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| MXIC          | MX30LF1G18AC | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| MXIC          | MX30LF1GE8AB | SLC  | 2K + 64           | 128 MB  | N/A (built-in ECC)                  | N/A (built-in ECC)                  |
| MXIC          | MX30LF2G18AC | SLC  | 2K + 64           | 256 MB  | D/A                                 | D/A                                 |
| MXIC          | MX30LF2G28AD | SLC  | 2K + 128          | 256 MB  | D/A                                 | D/A                                 |
| MXIC          | MX30LF4G18AC | SLC  | 2K + 64           | 512 MB  | D/A                                 | D/A                                 |
| MXIC          | MX60LF8G18AC | SLC  | 2K + 64           | 1 GB    | Pass<br>Note: must floating pin #38 | Pass<br>Note: must floating pin #38 |
| Spansion      | S34ML01G1    | SLC  | 2K + 64           | 128 MB  | D/A                                 | D/A                                 |
| Spansion      | S34ML01G2    | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| Spansion      | S34ML02G1    | SLC  | 2K + 64           | 256 MB  | D/A                                 | D/A                                 |
| Spansion      | S34ML02G2    | SLC  | 2K + 128          | 256 MB  | D/A                                 | D/A                                 |
| Spansion      | S34ML04G1    | SLC  | 2K + 64           | 512 MB  | D/A                                 | D/A                                 |
| Spansion      | S34ML04G2    | SLC  | 2K + 128          | 512 MB  | D/A                                 | D/A                                 |
| Winbond       | W29N01GV     | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| Winbond       | W29N01HV     | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| Zentel        | A5U1GA31ATS  | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| Zentel        | A5U1GA31BTS  | SLC  | 2K + 64           | 128 MB  | Pass                                | Pass                                |
| Zentel        | A5U2GA31BTS  | SLC  | 2K + 64           | 256 MB  | Pass                                | Pass                                |
| Zentel        | A5U4GA31ATS  | SLC  | 2K + 64           | 512 MB  | Pass                                | Pass                                |
| XTX (芯天下)     | XT27G01A     | SLC  | 2K + 128          | 128 MB  | Pass                                | Pass                                |

| Manufacturer | Part Number | Type | Page Size (Bytes) | Density | Test Result for Data Access | Test Result for IBR Booting                         |
|--------------|-------------|------|-------------------|---------|-----------------------------|---|
|              |             |      |                   |         |                             | Note: power-on setting must be ECC 12 or 15         |
| XTX (芯天下)    | XT27G01B    | SLC  | 2K + 64           | 128 MB  | Pass                        | Pass  |
| XTX (芯天下)    | XT27G02E    | SLC  | 2K + 128          | 256 MB  | D/A                         | Pass<br>Note: power-on setting must be ECC 12 or 15 |



### 3 eMMC

| Manufacturer | Part Number      | Type                     | Density | Test Result |
|--------------|------------------|--------------------------|---------|-------------|
| Kingston     | KE44B-26BN       | eMMC v4.41<br>4-bit mode | 4 GB    | Pass        |
| SkyMedi      | SP18A4G751B-0003 | eMMC v5.0<br>4-bit mode  | 4 GB    | Pass        |
| SkyMedi      | SP18A8G752B-0003 | eMMC v5.0<br>4-bit mode  | 8 GB    | Pass        |

## 4 SPI NOR

| Manufacturer | Part Number | Type         | Quad Read | Quad Write | Density  |
|--------------|-------------|--------------|-----------|------------|----------|
| Winbond      | W25X80      | 1-bit mode   | -         | -          | 8 Mbit   |
| Winbond      | W25Q16CV    | 1/4-bit mode | √         | √          | 16 Mbit  |
| Winbond      | W25Q16JV    | 1/4-bit mode | √         | √          | 16 Mbit  |
| Winbond      | W25Q32FV    | 1/4-bit mode | √         | √          | 32 Mbit  |
| Winbond      | W25Q32JV    | 1/4-bit mode | √         | √          | 32 Mbit  |
| Winbond      | W25Q64JV    | 1/4-bit mode | √         | √          | 64 Mbit  |
| Winbond      | W25Q128FV   | 1/4-bit mode | √         | √          | 128 Mbit |
| Winbond      | W25Q128JV   | 1/4-bit mode | √         | √          | 128 Mbit |
| Winbond      | W25Q128JVSQ | 1/4-bit mode | √         | √          | 128 Mbit |
| Winbond      | W25Q256FV   | 1/4-bit mode | √         | √          | 256 Mbit |
| Winbond      | W25Q256JV   | 1/4-bit mode | √         | √          | 256 Mbit |
| MXIC         | MX25L3206E  | 1-bit mode   | -         | -          | 32 Mbit  |
| MXIC         | MX25L6406E  | 1-bit mode   | -         | -          | 64 Mbit  |
| MXIC         | MX25L12835E | 1/4-bit mode | √         | √          | 128 Mbit |
| MXIC         | MX25L25635E | 1/4-bit mode | √         | √          | 256 Mbit |
| MXIC         | MX66L51235F | 1/4-bit mode | √         | √          | 512 Mbit |
| CFeon        | EN25QH16    | 1/4-bit mode | √         | -          | 16 Mbit  |
| CFeon        | EN25QH32    | 1/4-bit mode | √         | -          | 32 Mbit  |
| CFeon        | EN25QH64    | 1/4-bit mode | √         | -          | 64 Mbit  |
| CFeon        | EN25QH128   | 1/4-bit mode | √         | -          | 128 Mbit |
| CFeon        | EN25QH256   | 1/4-bit mode | √         | -          | 256 Mbit |
| Gigadevice   | GD25Q16     | 1/4-bit mode | √         | √          | 16 Mbit  |
| Gigadevice   | GD25Q32     | 1/4-bit mode | √         | √          | 32 Mbit  |
| Gigadevice   | GD25Q32E    | 1/4-bit mode | √         | √          | 32 Mbit  |
| Gigadevice   | GD25Q64     | 1/4-bit mode | √         | √          | 64 Mbit  |
| Gigadevice   | GD25Q128B   | 1/4-bit mode | √         | √          | 128 Mbit |
| Gigadevice   | GD25Q128E   | 1/4-bit mode | √         | √          | 128 Mbit |
| ESMT         | F25L64QA    | 1/4-bit mode | √         | √          | 64 Mbit  |
| Puya         | P25Q80U     | 1/4-bit mode | √         | √          | 8 Mbit   |

## Revision History

| Date       | Revision | Description          |
|------------|----------|----------------------|
| 2021.05.24 | 1.00     | 1. Initially issued. |

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