



Parallel NAND Flash

| | | |
|---------------|----------------|---------------|
| Density | 1Gb ~ 16Gb | Internal ECC |
| Voltage | 3.3V / 1.8V | |
| ECC | 4bits/512Bytes | -40°C ~ 105°C |
| Endurance/DR | 100KPEC/10Y | |
| IO | X8 / X16 | FBGA63 |
| Temperature | -40°C ~ 85°C | |
| Package | TSOP48 | GigaDevice |
| Compatibility | ONFi 1.0 | |

GigaDevice Parallel NAND Flash offers high-capacity storage and performance for multimedia data storage applications running on mobile devices, wearable devices, Internet of Thing (IOT), automotive infotainment systems, set-top boxes, data cards, high-standard industrial control, base station, voice storage, network communication, smart TVs and more.

Parallel NAND Flash

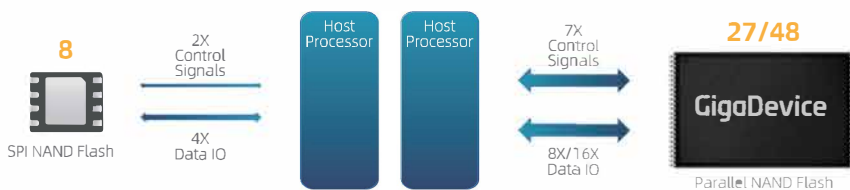
| Part No. | Voltage | Density | Sequential Access Time | I/O Bus | Page Size | ECC Requirement | Package |
|-------------|---------|----------|------------------------|---------|-----------|-----------------|-----------------------------|
| GD9FU1GxFxA | 3.3V | 1Gb | 25ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FU2GxFxA | 3.3V | 2Gb | 20ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FU4GxFxA | 3.3V | 4Gb | 20ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FU8GxExA | 3.3V | 8Gb | 20ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FUAGxDxA | 3.3V | 16Gb | 20ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm |
| GD9AU | 3.3V | 2Gb~16Gb | 20ns | x8/x16 | 2KB | Internal ECC | TSOP48 20*12mm |
| GD9FS1GxFxA | 1.8V | 1Gb | 45ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FS2GxFxA | 1.8V | 2Gb | 25ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FS4GxFxA | 1.8V | 4Gb | 25ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FS8GxExA | 1.8V | 8Gb | 25ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm/BGA63 9*11mm |
| GD9FSAGxDxA | 1.8V | 16Gb | 25ns | x8/x16 | 2KB | 4bit/512B | TSOP48 20*12mm |
| GD9AS | 1.8V | 2Gb~16Gb | 25ns | x8/x16 | 2KB | Internal ECC | TSOP48 20*12mm |



SPI NAND Flash

| | | | |
|-------------|--------------|--------------------------------|------------------------------|
| Density | 1Gb ~ 4Gb | Block0 is good with ECC | Cache read and cache program |
| Voltage | 3.3V / 1.8V | Qual IO up to 480Mbps | |
| ECC | Internal ECC | 2KB cache buffer for fast read | |
| High Speed | 120MHz | -40°C ~ 105°C | |
| Page Size | 2048 bytes | TFBGA24 | |
| Temperature | -40°C ~ 85°C | | |
| Package | WS0N8 | | |

Pin Count Advantage of SPI Interface



SPI NAND Flash

| Part No. | Voltage | Density | Frequency | I/O Bus | Page Size | Package |
|-----------|---------|---------|-----------|----------|-----------|-------------------------|
| GD5F1GQ4U | 3.3V | 1Gb | 120MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm/WS0N8 6*5mm |
| GD5F1GQ5U | 3.3V | 1Gb | 133MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |
| GD5F2GQ5U | 3.3V | 2Gb | 104MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |
| GD5F4GQ6U | 3.3V | 4Gb | 104MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |
| GD5F1GQ4R | 1.8V | 1Gb | 120MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm/WS0N8 6*5mm |
| GD5F1GQ5R | 1.8V | 1Gb | 104MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |
| GD5F2GQ5R | 1.8V | 2Gb | 80MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |
| GD5F4GQ6R | 1.8V | 4Gb | 80MHZ | x1/x2/x4 | 2KB | WS0N8 8*6mm |