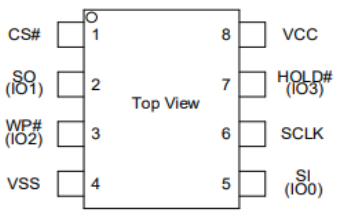
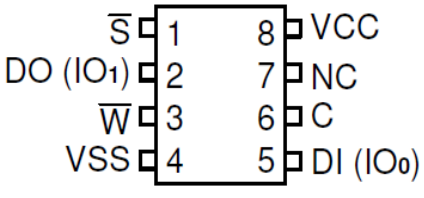
GD25Q40ETEGR vs AS25F34MD-10S1INTR Comparison

Features / Parameters	GD25Q40ETEGR	AS25F34MD-10S1INTR	Comments
Manufacturer/Supplier	GIGADEVICE	ALLIANCE MEMORY	
Product	Serial NOR FLASH Memory	Serial NOR FLASH Memory	Same
Density	4Mb	4Mb	Same
SPI	x1, x2, x4 (Standard, Dual & Quad SPI)	x1 & x2 (Standard & Dual SPI)	Giga better
Architecture	512K Byte Uniform Sector of 4K Byte Uniform Block of 32/64K Byte 256 Bytes per Programmable Page	512K Byte Uniform Sector of 4K Byte Uniform Block of 32/64K Byte 256 Bytes per Programmable Page	Same
Power Supply	2.7V~3.6V	2.7V~3.6V	Same
Cout Capacitance (Max.)	8pF	8pF	Same
Speed (Max)	133MHz Fast read with 30pf load Dual IO Data Transfer upto 266Mbps Quad IO Data Transfer upto 532Mbps	104MHz Fast read with 30pf load Dual IO Data Transfer upto 208Mbps	Giga better
Page Program Time	2ms (Max.)	2ms (Max.)	Same
Sector Erase Time (4KB)	300ms (Max.)	8ms (Max.)	Alliance better
Block Erase Time(64KB)	1.6s (Max.)	8ms (Max.)	Alliance better
Chip Erase Time	5s (Max.)	10ms (Max.)	Alliance better
Erase/Program cycles	Min.100,000 cycles	Min.100,000 cycles	Same
Data Retention	20years Typical	20years Typical	Same
Protection	S/W, H/W Lock/Write Protect	S/W, H/W Lock/Write Protect	Same
OTP	2x1024 Byte Security registers with OTP locks	3x512 Byte Security registers with OTP locks	
Deep PowerDown current	8uA (Max.)	3.5uA (Max.)	Alliance better
Standby Current	11uA (Typical.)	8uA (Typical)	Alliance better
Package	8pin SOP (150mils)	8pin SOP (150mils)	Same
Operating Temperature	-40C~125C Extended Industrial Grade	-40C~85C Industrial Grade	Giga wider
Compliance	ROHS and Halogen Free	ROHS an Halogen Free	Same
Pin to Pin compatibility	Yes 	Yes 	Different if Giga device is used as Quad SPI