ALLIANCE MEMORY
12815 NE 124th St STE#D, Kirkland, WA-98034

ASFC8G31M-51BIN vs ASFC8G31MB-51BIN Comparison

Part Number & result Parameter	ASFC8G31M-51BIN	ASFC8G31MB-51BIN	Comparison Result
Product Description	**eMMCv5.1 , Rev.0**	**eMMC v5.1, rev.B**	
Capacity	8GB	8GB	Same
Bus Width	x1 (default), x4 & x8	x1 (default) , x4 & x8	Same
eMMC Version	v5.1 (backward compatible with previous MMC versions)	v5.1 (backward compatible with previous MMC versions)	Same
Operating Power Supply (Controller)	VccQ = 1.70V ~ 1.95V or 2.7V ~ 3.6V	VccQ = 1.70V ~ 1.95V or 2.7V ~ 3.6V	Same
Operating Power Supply (NAND)	Vcc = 2.7V~3.6V	Vcc = 2.7V~3.6V	Same
Operating Temperature	Industrial (Ta = -40°C ~ 85°C)	Industrial (Ta = -40°C ~ 85°C)	Same
Storage Temperature	-40°C ~ 85°C	-40°C ~ 85°C	Same
Clock Frequency	MMC I/F Clock: 0~200MHz (Max) MMC I/F Boot Freq: 0~52MHz	MMC I/F Clock: 0~200MHz (Max) MMC I/F Boot Freq: 0~52MHz	Same
Interface Timing Mode	HS200/ HS400	HS200/ HS400	Same
NAND Flash Component	Density: 64Gb Die:1, MLC	Density: 64Gb Die:1, MLC	Same
Enhance mode support **Configure pSLC mode**	No	No	Same
Boot Partition 1	4096KB	4096KB	Same
Boot Partition 2	4096KB	4096KB	Same
Sequential Performance (HS400)	Write = 80MB/s Read = 140MB/s	Write = 110MB/s Read = 280MB/s	Rev.B better
Active Power Consumption	VCCQ = 120mA VCC = 120mA	VCCQ = 170mA VCC = 85mA	Comparable
Standby Power Consumption	VCCQ = 600uA VCC = 50uA	VCCQ = 80uA VCC = 45uA	Comparable
Sleep Power Consumption	VCCQ = 600uA	VCCQ = 80uA	Comparable
Package Type	153-ball TFBGA	153-ball TFBGA	Same
Package Outer Dimensions	11.5 x 13 x 1.0mm	11.5 x 13 x 1.199mm	Comparable
Package Ball pitch/matrix	0.5mm pitch, 6.5mm x 6.5mm	0.5mm pitch, 6.5mm x 6.5mm	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same
Pin to Pin Compatible	Yes.		