

Industrial PS3111-S11 Micro SSD

Phison's PS3111 micro SSD delivers all the advantages of Flash Disk technology with the Serial ATA I/II/III interface in an embedded BGA form factor. Phison micro SSD have a small physical size and can offer wide range application for industrial grade. Its capacity could provide a wide range from 2GB to 256GB. Moreover, it can reach up to 560MB/s read as well as 465MB/s write high performance, and lower power consumption makes it an ideal storage choice for high performance demanding mobile and customized devices.

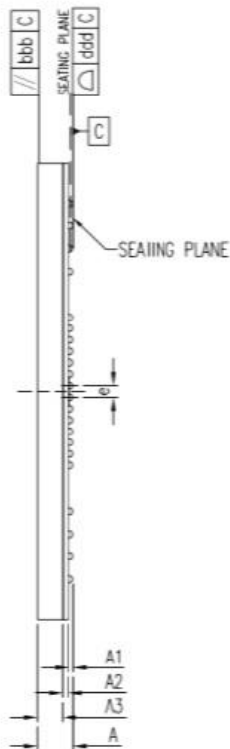
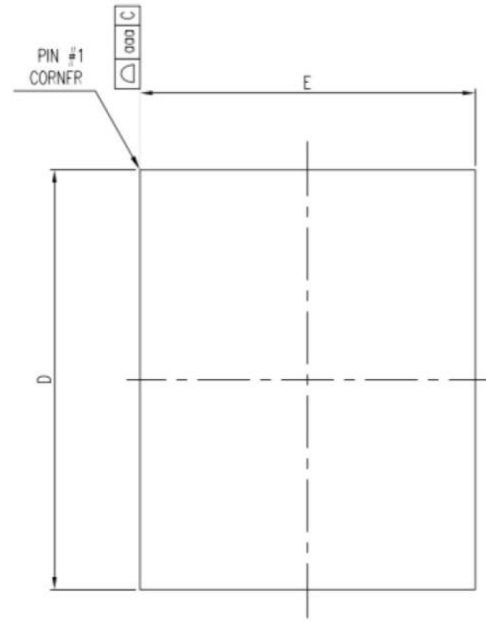
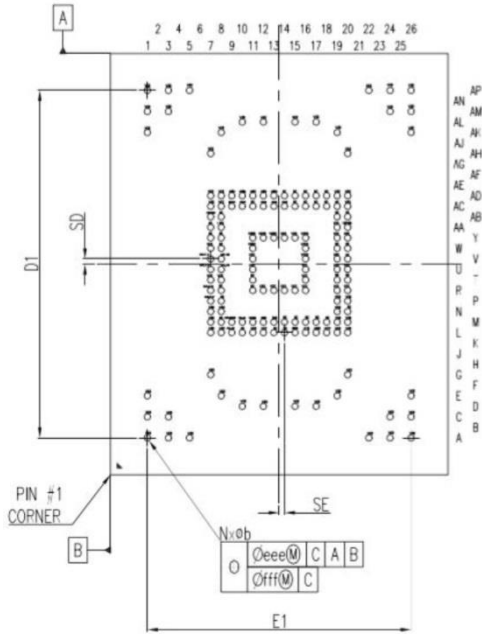


Product Specification and Features

Capacity	2GB up to 256GB	
SATA Interface	SATA Revision 3.2 SATA 1.5Gbps, 3Gbps, and 6Gbps interface	
Flash Interface and Support	Flash type: 15nm MLC/ Pseudo SLC/ 3D TLC	
Performance (Max)	Read/Write: Up to 560/465 MB/s IOPS: Up to 81K/74K	
Power Consumption	Active mode: < 1,600mW Idle mode: < 318mW	
TBW (Terabytes Written)	181 TBW for 128GB MLC	
MTBF	≥ 2,000,000 hours	
Advanced Technology	Default: SMART ECC™(LDPC+RAID ECC), SmartRefresh™, End to End Data Path Protection, SmartZip™, SmartFlush™ Optional: GuaranteeFlush™	
Specific Feature	Thermal Sensor	Support
	Military Erase	Optional
Operating Temperature	Diamond grade: -40°C ~ 85°C ; Gold grade: -25°C ~ 85°C	
Environment	High Temperature Storage Life Test: JESD22 A103 High Acceleration Stress Test: JESD 22-A110 Temperature cycling: JESD 22-A104	
RoHS and Halogen Free compliant	Support	

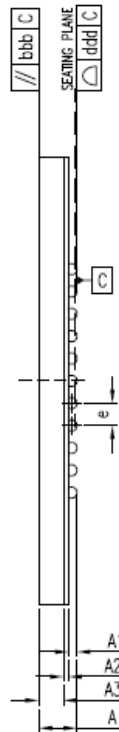
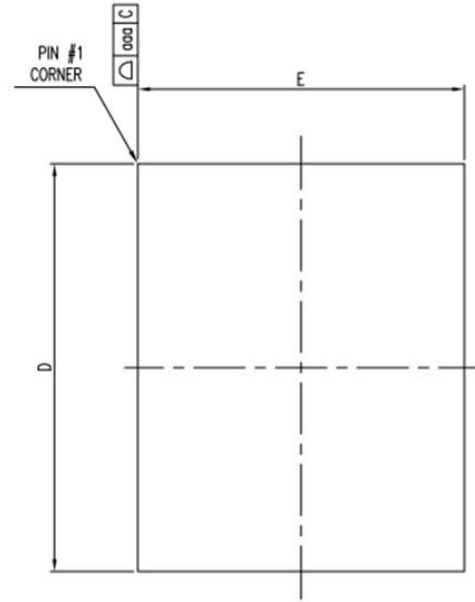
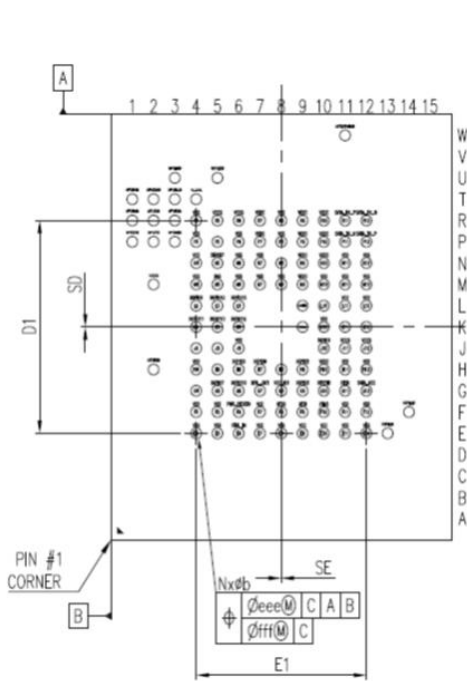
Physical Dimension

❖ 156 bli: 16mm (L) x 20mm (W) x 1.7mm (H)



	SYMBOL	DIMENSION IN MM		
		MIN.	NOM.	MAX.
TOTAL THICKNESS	A	1.45	1.57	1.70
STAND OFF	A1	0.16	0.21	0.26
SUBSTRATE THICKNESS	A2	0.26		
MOLD THICKNESS	A3	1.10		
BODY SIZE	D	20		
	F	16		
BALL DIAMETER		0.30		
BALL OPENING		0.275		
BALL WIDTH	b	0.25	0.30	0.35
BALL PITCH	e	0.50		
BALL COUNT	n	156		
EDGE BALL CENTER TO CENTER	D1	16.50 BSC.		
	E1	12.50 BSC.		
BODY CENTER TO CONTACT BALL	SD	0.25 BSC.		
	SE	0.25 BSC.		
JEDEC(PEF)		MO-276(REF.)		
PACKAGE EDGE TOLERANCE	aaa	0.15		
MOLD FLATNESS	bbb	0.20		
COPLANARITY	ddd	0.08		
BALL OFFSET(PACKAGE)	eee	0.15		
BALL OFFSET(BALL)	fff	0.05		

❖ 90 bli: 16mm (L) x 20mm (W) x 1.7mm (H)



Symbol [∘]	Dimension In MM [∘]		
	MIN. [∘]	NOM. [∘]	MAX. [∘]
A [∘]	1.61 [∘]	1.71 [∘]	1.81 [∘]
A1 [∘]	0.34 [∘]	0.39 [∘]	0.44 [∘]
A2 [∘]	0.22 [∘]		
A3 [∘]	1.10 [∘]		
D [∘]	20 [∘]		
E [∘]	16 [∘]		
e [∘]	1 BSC [∘]		
JEDEC [∘]	MO-276(Ref.) [∘]		