

G6338

NGFF2280 SSD

- | Support SATA interface rate of 6Gb/s
- | The new form factor standard for ultra book
- | Ultra thin designed
- | Increasing capacity by length

1. Introduction

BIWIN NGFF provides three different dimensions, 22*42mm, 22*60mm,22*80mm, and capacity from 32GB to 256GB. NGFF is an ideal storage solution for ultra book as it is than mSATA .

The NGFF SSD product electrically complies with the SATA-III standards and is electrically compatible with a serial ATA disk drive. In order to meet the high quality, the NGFF SSD products utilize Trinary Level Cell (TLC) NAND Flash Memory. Moreover, to ensure the data integrity, many advanced technologies are used such as dynamic bad block management, dynamic and static wear-leveling, and error correction code (ECC). The NGFF SSD drastically out performs conventional Hard Disk Drives. In addition, the NGFF Series could also provide rugged features in industrial PC under an extreme environment with a high MTBF.

2.Revision History

Version	Date	Description
V1.0	2017-01-11	-Initial Release

3.Specification

Product Model	Capacity	Form Factor	NAND Flash	Dimensions (mm) (L x W x H)	Weight (g)	Interface	Operating Temperature (°C)	Storage Temperature (°C)
G6338	128GB-256GB	NGFF	TLC	80x22x3.2	≤5.4	SATA III 6Gb/s	0 to +70	-40 to +85

4.Performance Details

Product Model	Capacity	ATTO (MB/s)		AS SSD (MB/s)			
		MaxSeq. Read / Write		Max Seq. Read / Write		Max 4K Read / Write	
G6338	128GB	560	467	522.3	412.77	21.12	114.06
	256GB	559	489	521.81	435.94	20.36	122.42

5.Power Consumption

Product Model	Capacity	Idle	Sleep	Read	Write	Unit
G6338	128GB	0.32	0.32	1.45	1.5	W
	256GB	0.35	0.35	1.13	1.38	W

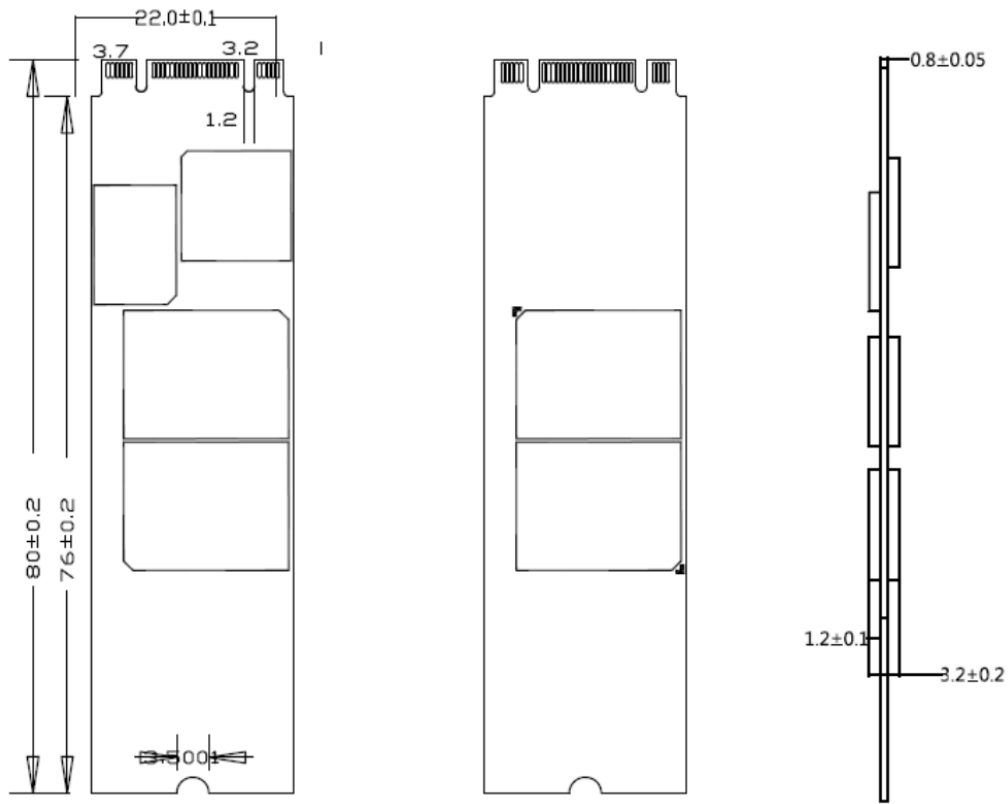
6.Reliability

Product Model	Capacity	Endurance: Total Bytes Written (TBW)*	Data Retention	MTBF	Warranty
G6338	128GB	Up to 43 TB	at 25°C: >10years	2 million hours	3 years
	256GB	Up to 87 TB			

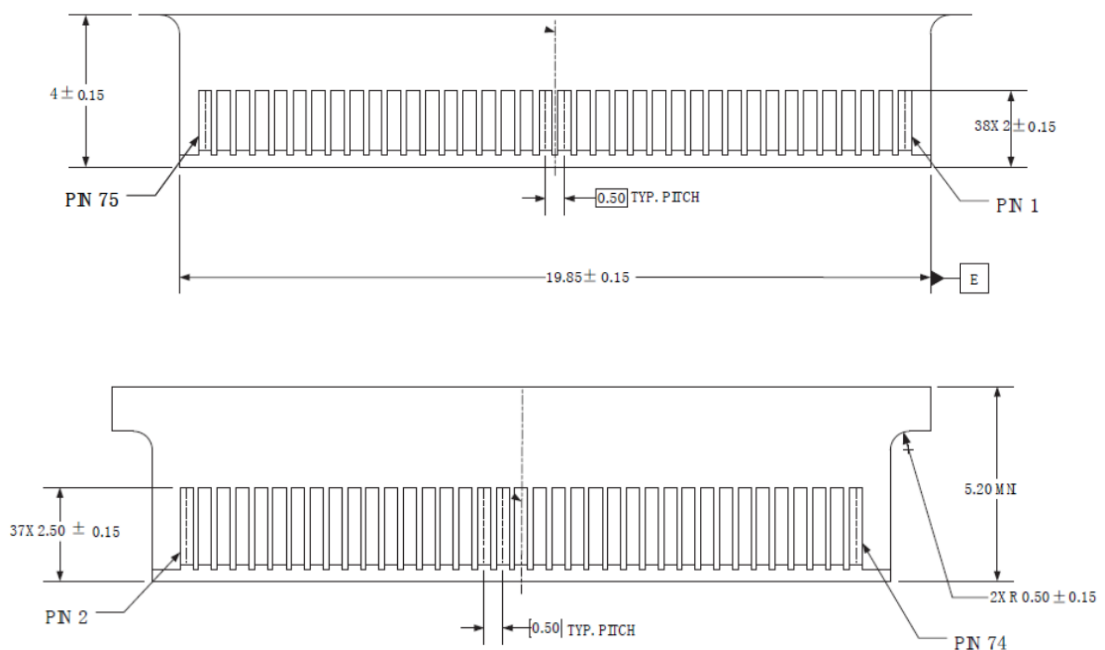
*Total bytes written=[(Flash P/E cycle)x(number of bits in drive)] / WAI

WAI=1.428704724

7. Dimensional Drawings (Unit: mm)



8. Interface Description



9.Pin Assignment

Pin#	Assignment	Description	Pin#	Assignment	Description
1	CONFIG 3	Defines module type	39	GND	Return Current Path
2	+3.3V	3.3V source	40	N/A	N/A
3	GND	Return Current Path	41	SATA-B+/PERn0	Host receiver differential signal pair
4	+3.3V	3.3V source	42	N/A	N/A
5	N/A	N/A	43	SATA-B-/PERp0	Host receiver differential signal pair
6	N/A	N/A	44	N/A	N/A
7	N/A	N/A	45	GND	Return Current Path
8	N/A	N/A	46	N/A	N/A
9	N/A	N/A	47	SATA-A-/PETn0	Host transmitter differential signal pair
10	N/A	N/A	48	N/A	N/A
11	N/A	N/A	49	SATA-A+/PETp0	Host transmitter differential signal pair
12	(removed for key)	Mechanical Notch B	50	N/A	N/A
13	(removed for key)	Mechanical Notch B	51	GND	Return Current Path
14	(removed for key)	Mechanical Notch B	52	N/A	N/A
15	(removed for key)	Mechanical Notch B	53	N/A	N/A
16	(removed for key)	Mechanical Notch B	54	N/A	N/A
17	(removed for key)	Mechanical Notch B	55	N/A	N/A
18	(removed for key)	Mechanical Notch B	56	N/A	N/A
19	(removed for key)	Mechanical Notch B	57	GND	Return Current Path
20	N/A	N/A	58	N/A	N/A
21	CONFIG 0	Defines module type	59	NOTCH	Mechanical Notch M
22	N/A	N/A	60	NOTCH	Mechanical Notch M
23	N/A	N/A	61	NOTCH	Mechanical Notch M
24	N/A	N/A	62	NOTCH	Mechanical Notch M
25	N/A	N/A	63	NOTCH	Mechanical Notch M
26	N/A	N/A	64	NOTCH	Mechanical Notch M
27	GND	Return Current Path	65	NOTCH	Mechanical Notch M
28	N/A	N/A	66	NOTCH	Mechanical Notch M
29	N/A	N/A	67	N/A	N/A
30	N/A	N/A	68	N/A	N/A
31	N/A	N/A	69	CONFIG 1	Defines module type
32	N/A	N/A	70	+3.3V	3.3V source
33	GND	Return Current Path	71	GND	Return Current Path
34	N/A	N/A	72	+3.3V	3.3V source
35	N/A	N/A	73	GND	Return Current Path
36	N/A	N/A	74	+3.3V	3.3V source
37	N/A	N/A	75	CONFIG 2	Defines module type
38	DEVSLP	Device Sleep, Input.			

10. Ordering Information

Model Name	Product Part Number	Capacity
G6338	CNF82GS2402-128	128GB
	CNF82GS2402-256	256GB

11. Contact Us

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