

N2201

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 dimensions, 22*80mm, and capacity from 120GB to 240GB. 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 MLC 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 outperforms 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	2017-09-15	-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)
N2201	120GB-240GB	NGFF	MLC	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	
N2201	120GB	484	452	454.79	415.11	35.17	127.0
	240GB	562	507	524.47	427.45	35.73	130.14

5.Power Consumption

Product Model	Capacity	Idle	Sleep	Read	Write	Unit
N2201	120GB	0.48	0.48	1.32	1.65	W
	240GB	0.48	0.48	1.68	2.51	W

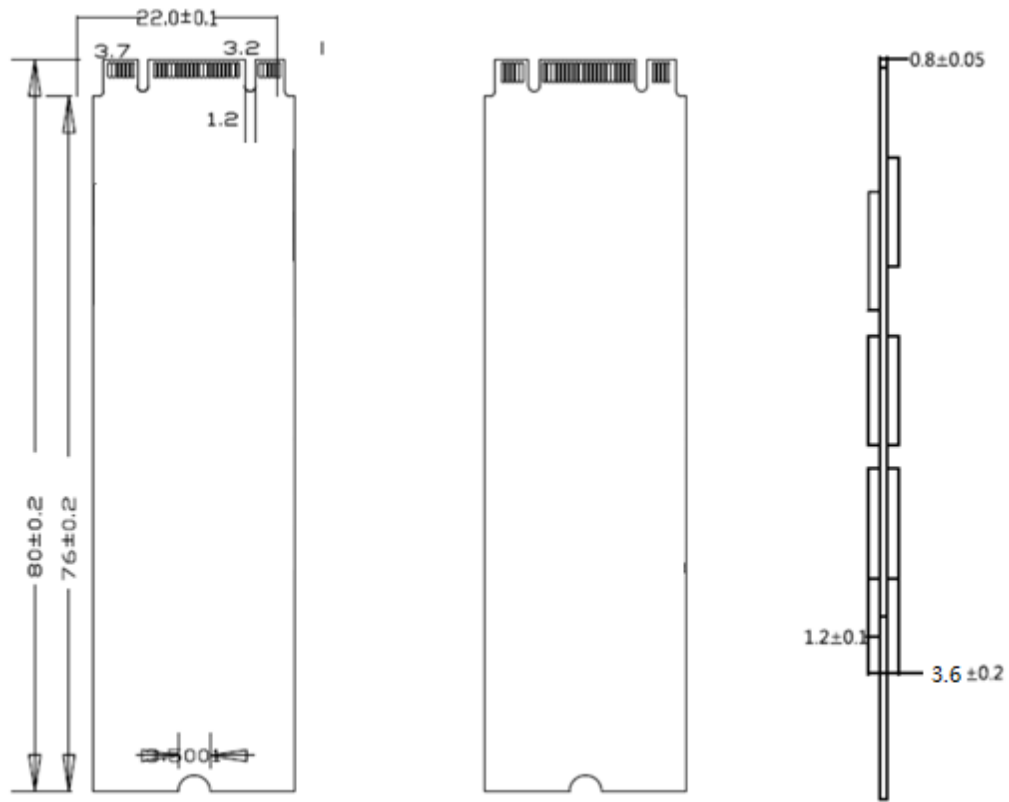
6.Reliability

Product Model	Capacity	Endurance: Total Bytes Written (TBW)*	Data Retention	MTBF	Warranty
N2201	120GB	Up to 137 TB	at 25°C: >10years	2 million hours	3 years
	240GB	Up to 335 TB			

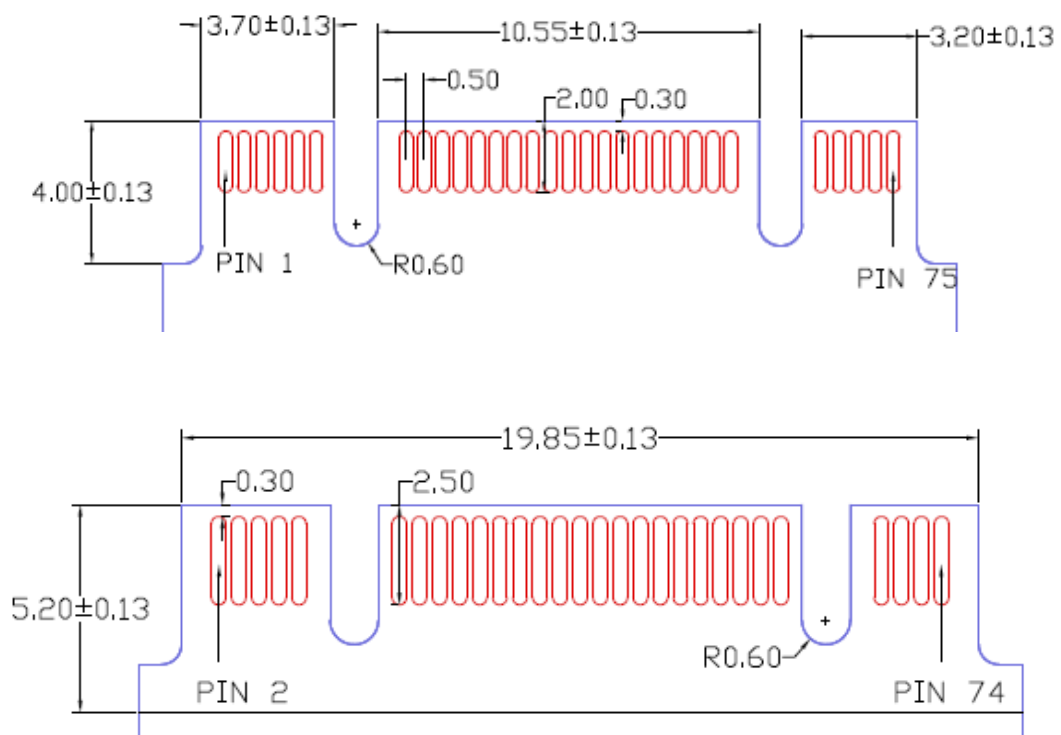
*Total bytes written=[(Flash P/E cycle)x(number of bits in drive)] / WAI

WAI=2.1

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
N2201	CNF82CS2402-120	120GB
	CNF82CS2402-240	240GB

11. Contact Us

Headquarter:

Add: 5F, 4th Block, Tongfuyu Ind. Park, Tanglang, Xili, Shenzhen, China.

Zip Code: 518055

Tel: +86 755 26715701

Email: sales@biwin.com.cn

BIWIN America Branch:

Add: 46721 Fremont Blvd, Fremont, CA 94538 USA

Tel: 510-979-9912

Email: america@biwin.com.cn