

HG60-00021-00 verification new HSN report

FOXCONN VN Team.

May.10th, 2023

Background



➤ **Purpose**: Change new HSN for ECO1004578 project:

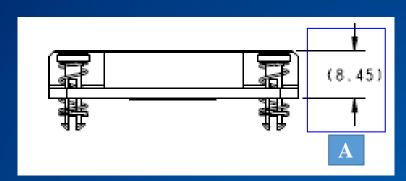
+ Model : BCM957412N4120DC

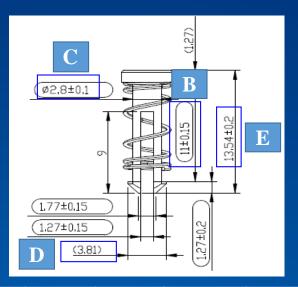
+ Q'ty: 10pcs + Vendor: Auras

+ PN: HG60-00021-00 (Description: Assembly, Heat Sink, 65x40.74x8.45)

+ Vendor : Auras

➤ Measure dimension material review :





Unit: mm

Item	Drawing	Min spec	Max spec	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
A	8.45 ± 0.1	8.35	8.55	8.40	8.38	8.38	8.37	8.38	8.38	8.39	8.40	8.37	8.40
В	11 ± 0.15	10.85	11.15	10.92	10.89	10.91	10.90	10.89	10.92	10.89	10.89	10.89	10.92
С	2.8 ± 0.1	2.70	2.90	2.78	2.81	2.77	2.78	2.79	2.77	2.76	2.77	2.78	2.79
D	3.81 ± 0.1	3.71	3.91	3.75	3.78	3.82	3.80	3.79	3.80	3.81	3.76	3.77	3.79
Е	13.54 ± 0.2	13.34	13.74	13.65	13.60	13.57	13.59	13.61	13.64	13.59	13.58	13.58	13.56

Conclusion: We checked the dimension of new HSN in spec.

Compare old HSN with new HSN



> Appearance compare:

Item		Actual Heatsink		Drawing Heatsink				
	Top side	Bot side	Push pin	Top side	TIM	Push pin		
Old HSN		7001 97, 00	Plastic	57,00	Thickness: 0.11mm	13.70		
New HSN		Sample I	Copper	(40,74)	Thickness: 0.13mm	(1,27) (02.840.1) (3.81) (3.81) (3.81) (3.81) (3.81) (3.81)		

> Conclusion: - Appearance checked

- 1. Change design of push pin: The material change from plastic to copper. The dimension as the same.
- 2. Change material of TIM: The material change from T588 to T725. The new Tim have protect sheet cover & need remove before assembly.
- 3. Change design TOP side: The fins old heatsink more than new heatsink.
- 4. Change design BOT side: The old HSN have copper and the new HSN haven't copper.

Old HSN assembly review

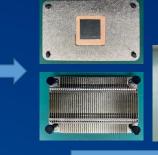


Picture review : (parameter setting : 0.2 ± 0.02 mpa)













Fixture

Place PCBA

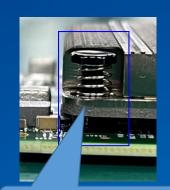
Place cover

VI HSN

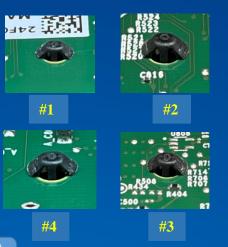
Place HSN



Disassembly HSN check TIM contact with BGA good



Check push pin don't shift after assembly



Assembly OK



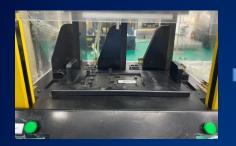


VI check after HSN

New HSN assembly review

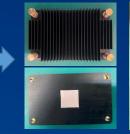


Picture review : (parameter setting : 0.2 ± 0.02 mpa)













Fixture

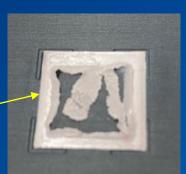
Place PCBA

Place cover

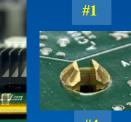
VI HSN

Place HSN

















Disassembly HSN check TIM contact with BGA good

Check push pin don't shift after assembly

Assembly OK

VI check after HSN

Summary



Conclusion:

- 1. The structure of new HSN was change ,but the dimension are the same . So Can assembly as normal old HSN ,no detect any issue.
- 2. The Tim contact with BGA good.
- 3. The new Tim material will peel of after remove, So can't recycle HSN if need rework.



Thank you

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