

基石酷联微电子（北京）有限公司



2023.09

www.gscoolink.com

Keep Moving

2023

1	2	3	4	5	6	7	8	9	10	11	12
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GSV6201

TypeC-HDMI2.1
HDCP2.2
4 Lanes 3CC
64QFN
4K 60Hz

GSV2201

TypeC-HDMI2.0
HDCP2.2
4 Lanes 3CC
64QFN
4K 60Hz

GSV2201E

TypeC-HDMI2.0
HDCP2.2
4 Lanes 4CC
64QFN
4K 60Hz

GSV2201S

TypeC-HDMI2.0
HDCP2.2
2 Lanes 4CC
48QFN
4K 60Hz

GSV2201D

TypeC-HDMI2.0
HDCP2.2
4 Lanes 2CC
48QFN
4K 60Hz

GSV1201E

TypeC-HDMI2.0
HDCP1.4
4 Lanes 4CC
64QFN
4K 30Hz

GSV1201S

TypeC-HDMI1.4
HDCP1.4
2 Lanes 4CC
48QFN
4K 30Hz

GSV1201D

TypeC-HDMI2.0
HDCP1.4
4 Lanes 2CC
48QFN
4K 30Hz



GSV TypeC to HDMI 产品 Overview

	GSV6201	GSV2201	GSV2201E	GSV2201S	GSV2201D	GSV1201E	GSV1201S	GSV1201D
CC	3CC	3CC	4CC 支持双母口	4CC支持双母口	2CC 支持单母口	4CC 支持双母口	4CC 支持双母口	2CC 支持单母口
Video Resolution								
2 Lane Mode	4K 60Hz 444	4K 60Hz 444	4K 60Hz 444	4K 60Hz 444	4K 60Hz 444	4K 30Hz	4K 30Hz	4K 30Hz
4 Lane Mode	4K 144Hz/8K 60Hz	4K 60Hz 444	4K 120Hz/8K 30Hz	NA	4K 120Hz/8K 30Hz	4K 30Hz	NA	4K 30Hz
Max DP Speed	8.1Gbps	8.1Gbps	8.1Gbps	8.1Gbps	8.1Gbps	5.4Gbps	5.4Gbps	5.4Gbps
HDMI TX version	HDMI2.1	HDMI2.0	HDMI2.0	HDMI2.0	HDMI2.0	HDMI2.0	HDMI1.4	HDMI2.0
HDCP	HDCP2.3/1.4	HDCP2.3/1.4	HDCP2.3/1.4	HDCP2.3/1.4	HDCP2.3/1.4	HDCP1.4	HDCP1.4	HDCP1.4
USB2.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Color Space	CSC	CSC	444-422-420/CSC	444-422-420/CSC	444-422-420/CSC	NA	NA	NA
HBE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Consumption	Max 1.1W	Max 850mw	Max 680mw	Max 650mw	Max 650mw	Max 600mw	Max 600mw	Max 600mw
Flash	外部	外部	内置	内置	内置	内置	内置	内置
Package	64 QFN	64QFN	64QFN	48QFN	48QFN	64QFN	48QFN	48QFN
GPIO	8GPIO	8GPIO	14GPIO	6GPIO	6GPIO	14 GPIO	6GPIO	6 GPIO
Others	Support DSC bypass		pin-pin 兼容2201			pin-pin兼容2201E	pin-pin兼容2201S	pin-pin兼容2201D
Apps	High Fresh Rate Dongle	Hub	Hub	Hub	Dongle/Cable	Hub	Hub	Dongle/Cable

视频处理inside 2201E/D/S

- 灵活的HBE能力以支持更高的视频分辨率
 - 支持4K 60Hz 444 8bits
 - 支持535MHz - 597MHz 转换
- 丰富的视频处理
 - 444-422-420
 - RGB-YUV

GSV20XX系列支持完备的HDMI2.0 HDR 及音频HBR

HDR



Non HDR



完备的CTS测试

- 面向专业音视频领域出货数千万片HDMI2.0/2.1产品，充分验证了高规格HDCP2.2/2.3及HDMI的兼容性

Device Under Test
 /Vendor_Name Gscoolink
 /Model_Part_Number PD3.1
 /Product_Revision 01
 /JUT_Alias Gscoolink-PD3.1-0
 /Port_Label port_a

Saturday, August 26, 2023 - 13:26
 Duration: 84 minutes, 21 seconds

ISB Type C - USBIF
 /TS implemented: r0 89 2021-10-28 (full), r0 90 2023-05-18 (partial)

Compliance Test	Result	Description
TD 4.1.1 Initial Voltage Test	Pass	
TD.4.1.1.C.1	Pass	

DP 1.4a Sink Passed

Total Tests 37
 Passed Tests 37
 Failed Tests 0
 N/A Tests 0
 Indeterminate Tests 0

Total Tests 70
 Passed Tests 18
 Failed Tests 0
 N/A Tests 52
 Indeterminate Tests 0

Total Tests 150
 Passed Tests 100
 Failed Tests 0
 N/A Tests 50
 Indeterminate Tests 0

USB-IF PD3.1 Passed

DP 1.4a Sink Compliance Test Report CTS Core R1.0					
Results Name:	2023-08-16-2201s-all			Manufacturer:	GSV
Date Tested:	August 16, 2023 11:43 AM			Model Name:	GSV DP1.4a
Overall Status:	Pass			Port Tested:	1
Report Index / Summary					
Test 5.2.1.1	Pass	Test 5.2.1.2	Pass	Test 5.2.1.3	Pass
Test 5.2.1.4	Pass	Test 5.2.1.5	Pass	Test 5.2.1.6	Pass
Test 5.2.1.7	Pass	Test 5.2.1.8	Pass	Test 5.2.1.9	Pass
Test 5.2.1.10	Pass	Test 5.2.1.11	Pass	Test 5.2.1.12	Pass
Test 5.2.2.1	Skipped	Test 5.2.2.2	Pass	Test 5.2.2.3	Pass
Test 5.2.2.4	Pass	Test 5.2.2.5	Pass	Test 5.2.2.6	Pass
Test 5.2.2.7	Pass	Test 5.2.2.8	Pass	Test 5.2.2.9	Pass
Test 5.3.1.1	Pass	Test 5.3.1.2	Pass	Test 5.3.1.3	Pass
Test 5.3.1.4	Pass	Test 5.3.1.5	Pass	Test 5.3.1.6	Pass
Test 5.3.1.7	Pass	Test 5.3.1.8	Pass	Test 5.3.1.9	Pass
Test 5.3.2.1	Pass	Test 5.3.2.2	Pass	Test 5.4.1.1	Pass
Test 5.4.1.2	Pass	Test 5.4.1.3	Pass	Test 5.4.1.4	Pass
Test 5.4.2	Pass	Test 5.4.3.1	Pass	Test 5.4.3.2	Pass
Test 5.4.4.2	Pass	Test 5.4.4.3	Pass	Test 5.4.4.4	Pass
Test 5.4.4.5	Pass	Test 5.4.4.6	Pass	Test 600.1.1	Pass
CDF		Equipment Info			



完备的CTS测试 (Cont' d)

January 17, 2023 7:56 PM www.quantumdata.com

HDMI FRL Source Compliance Test Report

Results Name:	01_17_2023_16_33_20	Manufacturer:	gscoolink
Date Tested:	January 17, 2023 4:33 PM	Model Name:	gsv62xx
Overall Status:	Pass	Port Tested:	1

Report Index / Summary

Test HFR1-11	Pass	Test HFR1-19	Pass	Test HFR1-20	Pass
Test HFR1-21					
Test HFR1-10					
Test HFR1-17					
Test HFR1-30					
Test HFR1-14					
Test HFR1-15					
Test HFR1-67					
Test HFR1-46					

January 17, 2023 10:33 PM www.quantumdata.com

HDMI TMDS Source Compliance Test Report

Results Name:	01_17_2023_21_44_41	Manufacturer:	gscoolink
Date Tested:	January 17, 2023 10:33 PM	Model Name:	gsv62xx
Overall Status:	Pass	Port Tested:	1

Test HF1-10	Pass
Test HF1-13	Pass
Test HF1-31	Pass
Test HF1-15	Pass
Test HF1-34	Pass
Test HF1-20	Pass
Test HF1-66	Pass
CDF	

February 3, 2023 4:12 PM www.quantumdata.com

HDCP 2.3 on HDMI CTS 1.0 Repeater Compliance Test Report

Results Name:	02_03_2023_14_29_29	Manufacturer:	gscoolink
Date Tested:	February 3, 2023 3:00 PM	Model Name:	gsv62xx
Overall Status:	Pass	Port Tested:	1

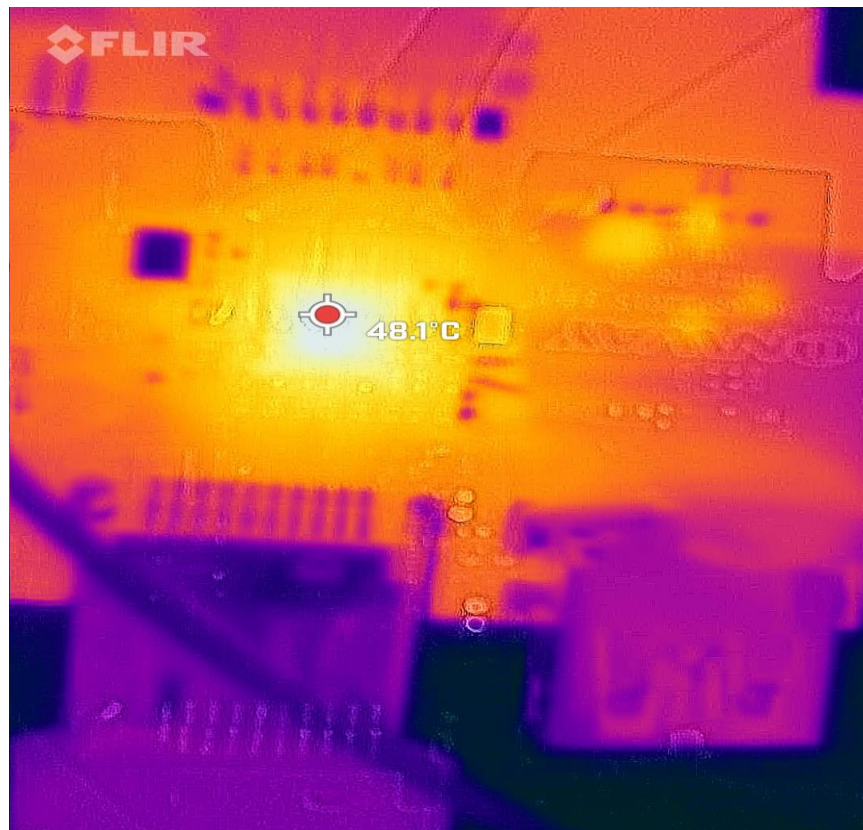
Report Index / Summary

Test 3A-01	Pass	Test 3A-02	Pass	Test 3A-03	Pass
Test 3A-04	Pass	Test 3A-05	Pass	Test 3A-06	Pass
Test 3A-07	Pass	Test 3B-01	Pass	Test 3B-02	Pass
Test 3B-03	Pass	Test 3B-04	Pass	Test 3B-05	Pass
Test 3B-06	Pass	Test 3B-07	Pass	Test 3C-01	Pass
Test 3C-02	Skipped	Test 3C-03	Skipped	Test 3C-04	Pass
Test 3C-05	Pass	Test 3C-06	Pass	Test 3C-07	Pass
Test 3C-08	Pass	Test 3C-09	Pass	Test 3C-10	Pass
Test 3C-11	Pass	Test 3C-12	Pass	Test 3C-13	Pass
Test 3C-14	Pass	Test 3C-15	Pass	Test 3C-16	Pass
Test 3C-17	Pass	Test 3C-18	Pass	Test 3C-19	Pass
Test 3C-20	Pass	Test 3C-21	Pass	Test 3C-22	Pass
Test 3C-23	Pass	Test 3C-24	Pass	Test 3C-25	Pass
CDF		_Equipment Info_			

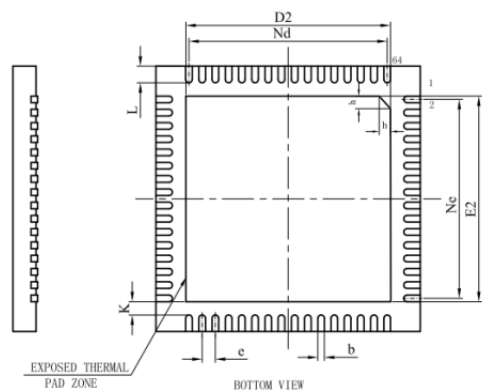


功耗的持续迭代和优化

■ 2201E 常温测试结果

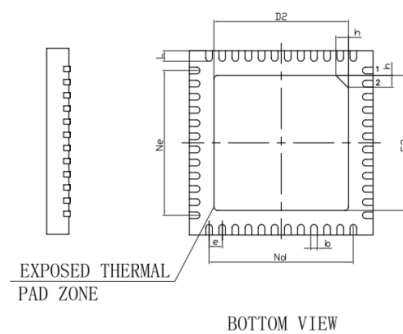


更灵活的封装选择面向不同的应用场景



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.70	0.75	0.80
A1	—	0.02	0.05
b	0.15	0.20	0.25
c	0.18	0.20	0.25
D	7.90	8.00	8.10
D2	6.10	6.20	6.30
e	0.40BSC		
Nd	6.00BSC		
E	7.90	8.00	8.10
E2	6.10	6.20	6.30
Ne	6.00BSC		
L	0.45	0.50	0.55
K	0.20	—	—
h	0.30	0.35	0.40
载体尺寸 (mil)	258*258		

64QFN 8x8mm



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.70	0.75	0.80
A1	—	0.02	0.05
b	0.15	0.20	0.25
c	0.18	0.20	0.23
D	5.90	6.00	6.10
D2	4.10	4.20	4.30
e	0.40BSC		
Ne	4.40BSC		
Nd	4.40BSC		
E	5.90	6.00	6.10
E2	4.10	4.20	4.30
L	0.35	0.40	0.45
h	0.30	0.35	0.40
载体尺寸 (mil)	177*177		

48QFN 6x6mm 支持Dual CC 及4K 60 双lane

高性价比

- 4K 60Hz 规格在功能和成本方面具有非常好的平衡
- 支持4CC 48QFN Package
- 超强ESD能力，无需外部ESD器件
 - HBM 8KV

4K 60 – 4K 30 完全pin-pin兼容

TypeC

- Keep Moving

- Keep 卷ing...

2201 E/S/D

1201 E/S/D

