



ADVANCE INFORMATION

WCMC2016V1X

128K x 16 Pseudo Static RAM DIE

General Physical Specification

For product parameters and availability, please refer to the WCMC2016V1X product datasheet available on the Cypress Semiconductor Website (<http://www.cypress.com>).

Mfg Part Number:	GC2016V5A	Substrate Connection Req.:	Ground
Die Part Number:		Wafer Diameter [mm]:	200.00
Die Technology:	PowerChip 0.165 μ m	Die Size [μm]:	4010.74 x 1565.84
Metal I:	420 nm TiN/AlCu	Step Size [μm]:	4095.44 x 1650.89
Metal II:	880 nm TiN/Ti/AlCu/TiN	Scribe Size [μm]:	84.70 x 84.94
Metal III:	None	Pad Count:	64
Die Passivation:	780nm P-Si ₃ N ₄ + Polyimide	Pad Size [μm]:	73.6 x 73.6

Product Thickness Guide

Code	Description	Min	Nom	Max	Unit
XW	Die (25-30 mil) in wafer form.	617	685	754	μ m
XW14	Die (14 mil) in wafer form.	320	355	391	μ m
XW11	Die (11 mil) in wafer form.	252	280	308	μ m



☐ 1	64 ☐
☐ 2	63 ☐
☐ 3	61 ☐
☐ 4	60 ☐
☐ 5	59 ☐
☐ 6	58 ☐
☐ 7	57 ☐
☐ 8	56 ☐
☐ 9	55 ☐
☐ 10	54 ☐
☐ 11	53 ☐
☐ 12	52 ☐
☐ 13	51 ☐
☐ 14	50 ☐
☐ 15	49 ☐
☐ 16	48 ☐
☐ 17	47 ☐
☐ 18	46 ☐
☐ 19	45 ☐
☐ 20	44 ☐
☐ 21	43 ☐
☐ 22	42 ☐
☐ 23	41 ☐
☐ 24	40 ☐
☐ 25	39 ☐
☐ 26	38 ☐
☐ 27	37 ☐
☐ 28	36 ☐
☐ 29	35 ☐
☐ 30	34 ☐
	33 ☐
	32 ☐
	31 ☐



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All units in μm . (0,0) is the lower Left hand corner of the die.

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Bond Pad Coordinates and Signal Descriptions

ID	Pad Name	Pad Function	Description	X Coord [μm]	Y Coord [μm]
1	A15	ADDR	Address	98.31	3950.48
2	TEST1	DNU	Do Not Use	98.31	3851.12
3	A14	ADDR	Address	98.31	3751.76
4	TEST2	DNU	Do Not Use	98.31	3652.40
5	A13	ADDR	Address	98.31	3553.04
6	A12	ADDR	Address	98.31	3453.68
7	A11	ADDR	Address	98.31	3354.32
8	A10	ADDR	Address	98.31	3254.96
9	A9	ADDR	Address	98.31	3155.60
10	A8	ADDR	Address	98.31	3056.24
11	TEST3	DNU	Do Not Use	98.31	2956.88
11	TEST4	DNU	Do Not Use	98.31	2857.52
12	WE	WE	Write Enable/Select Bar	98.31	2758.16
13	CE2	CE ₂	Chip Enable/Select 2	98.31	2658.80
14	VCC	V _{CC}	Power Supply (Core)	98.31	2559.44
15	VCC	V _{CC}	Power Supply (Core)	98.31	2460.08
16	VSS	GND	Ground (also V _{SS})	98.31	2261.36
17	VSS	GND	Ground (also V _{SS})	98.31	2201.66
18	UBE	BHE	Byte (High) Enable/Select Bar	98.31	2261.36
19	LBE	BLE	Byte (Low) Enable/Select Bar	98.31	2162.00
20	TEST5	DNU	Do Not Use	98.31	2062.64
20	TEST6	DNU	Do Not Use	98.31	1963.28
20	TEST7	DNU	Do Not Use	98.31	1863.92
21	A17	ADDR	Address	98.31	1764.56
22	A7	ADDR	Address	98.31	1665.20
23	A6	ADDR	Address	98.31	1565.84
24	A5	ADDR	Address	98.31	1466.48
25	A4	ADDR	Address	98.31	1367.12
26	A3	ADDR	Address	98.31	1267.76
27	A2	ADDR	Address	98.31	1168.40
28	A1	ADDR	Address	98.31	1069.04
29	A16	ADDR	Address	1467.54	3909.67
30	VSS	GND	Ground	1467.54	3810.31
31	VCC	V _{CC}	Power Supply (Core)	1467.54	3710.95
32	I/O15	DQ ₁₅	Bi-directional Data Input/Output 15	1467.54	3611.59
33	I/O7	DQ ₇	Bi-directional Data Input/Output 7	1467.54	3484.95
34	I/O14	DQ ₁₄	Bi-directional Data Input/Output 14	1467.54	3358.31
35	I/O6	DQ ₆	Bi-directional Data Input/Output 6	1467.54	3231.67

ID	Pad Name	Pad Function	Description	X Coord [μm]	Y Coord [μm]
36	I/O13	DQ ₁₃	Bi-directional Data Input/Output 13	1467.54	3105.04
37	I/O5	DQ ₅	Bi-directional Data Input/Output 5	1467.54	2978.4
38	I/O12	DQ ₁₂	Bi-directional Data Input/Output 12	1467.54	2851.76
39	I/O4	DQ ₄	Bi-directional Data Input/Output 4	1467.54	2725.12
40	VSS	GND	Ground (also V _{SS})	1467.54	2598.20
41	VSS	GND	Ground (also V _{SS})	1467.54	2498.84
42	VSS	GND	Ground (also V _{SS})	1467.54	2399.48
43	VCC	VCC	Power Supply (Core)	1467.54	2300.12
44	VCC	VCC	Power Supply (Core)	1467.54	2200.76
45	VCC	VCC	Power Supply (Core)	1467.54	2101.40
46	I/O11	DQ ₁₁	Bi-directional Data Input/Output 11	1467.54	2002.04
47	I/O3	DQ ₃	Bi-directional Data Input/Output 3	1467.54	1875.40
48	I/O10	DQ ₁₀	Bi-directional Data Input/Output 10	1467.54	1748.76
49	I/O2	DQ ₂	Bi-directional Data Input/Output 2	1467.54	1622.13
50	I/O9	DQ ₉	Bi-directional Data Input/Output 9	1467.54	1495.49
51	I/O1	DQ ₁	Bi-directional Data Input/Output 1	1467.54	1368.85
52	I/O8	DQ ₈	Bi-directional Data Input/Output 8	1467.54	1242.21
53	I/O0	DQ ₀	Bi-directional Data Input/Output 0	1467.54	1115.57
54	TEST8	DNU	Do Not Use	1467.54	988.61
55	TEST9	DNU	Do Not Use	1467.54	843.80
58	OE#	OE	Output Enable	1467.54	744.44
59	VSS	GND	Ground	1467.54	645.08
60	VCC	VCC	Power Supply (Core)	1467.54	545.72
61	TEST10	DNU	Do Not Use	1467.54	446.36
62	A0	ADDR	Address	1467.54	347.00

Die Ordering Information

Silicon Type	Ordering Code	Wafer Code	Wafer/Die Type	Operating Range
KGD2	WCMC2016V1X-2XWI	XW	Die (25-30 mil) in wafer form.	Industrial
	WCMC2016V1X-2XW14I	XW14	Die (14 mil) in wafer form.	
	WCMC2016V1X-2XW11I	XW11	Die (11 mil) in wafer form.	

This datasheet is prepared and approved by Weida Semiconductor, Inc.. Weida Semiconductor, Inc. reserve the right to change the specifications without notice.

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Revision History

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WCMC2016V1X

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Document Number: 38-xyxyx

Rev	ECN	Issue Date	Orig. Change	Description of Change
**			MPR	New Datasheet