

Noritake Vacuum Fluorescent Display Modules



PIN CONNECTIONS

Pin No.	Symbol	Pin No.	Symbol
1	Vss	8	DB1
2	Vcc	9	DB2
3	NC	10	DB3
4	RS	11	DB4
5	RW (V/R)	12	DB5
6	E (RD)	13	DB6
7	DBO	14	DB7

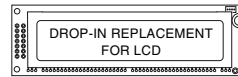
VFD over LCD Advantages:

- Higher Brightness
- Wider Viewing Angle
- Wider Temperature Range

Features:

- LCD compatible interface
- Same mounting locations as LCD
- 5V single power supply

- Power save mode (display off)
- 4 level brightness control (by code)
- 8-bit or 4-bit interface
- Wide operating temperature range
- 8 user definable fonts
- Power consumption similar to LCD with LED backlight
- 5mm or 9mm character height
- Color: Blue-Green



Display Format	Character Format	Outline Dimensions W x H x D (mm)	Viewing Area W x H (mm)	Character Size W x H (mm)	Dot Size W x H (mm)	Operating Temperature (°C)	Storage Temperature (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each			Noritake Part No.
										1	10	50	
16 x 2	5 x 7 Dots	80 x 36 x 13.2	51.36 x 11.4	2.46 x 4.76	0.38 x 0.56	-40 - 85	-50 - 85	5	286-1019-ND	63.34	58.59	47.51	CU16025ECPB-W6J
16 x 2	5 x 8 Dots	122 x 44 x 20.2	82.70 x 19	3.85 x 8.0	0.53 x 0.89	-40 - 85	-50 - 85	5	286-1017-ND	101.50	93.89	76.13	CU16029ECPB-W1J
20 x 2	5 x 7 CURS	116 x 37 x 16	70.8 x 11.5	2.4 x 5.4	0.4 x 0.5	-40 - 85	-50 - 85	5	286-1005-ND	64.90	60.04	48.68	CU20025ECPB-W1J
20 x 2	5 x 7 Dots	146 x 43 x 19	102.6 x 18.8	3.8 x 8.0	0.6 x 0.975	-40 - 85	-50 - 85	5	286-1028-ND	105.70	97.78	79.28	CU20029ECPB-W1J
20 x 4	5 x 7 Dots	98 x 60 x 17	70.8 x 20.9	2.4 x 4.7	0.4 x 0.5	-40 - 85	-50 - 85	5	286-1064-ND	100.86	93.30	75.65	CU20045-UW5J
24 x 2	5 x 7 Dots	125 x 36 x 20.74	85.2 x 11.5	2.4 x 4.7	0.4 x 0.5	-40 - 85	-50 - 85	5	286-1029-ND	75.02	69.40	56.27	CU24025ECPB-W1J
40 x 2	5 x 7 Dots	182 x 33.5 x 20.5	138.8 x 11.5	2.3 x 4.7	0.38 x 0.5	-40 - 85	-50 - 85	5	286-1062-ND	101.74	94.11	76.31	CU40025-UW6J
40 x 2	5 x 8 Dots	146 x 62.5 x 23	99.6 x 37.6	3.7 x 8.8	0.57 x 0.84	-40 - 85	-50 - 85	5	286-1063-ND	156.64	144.90	117.48	CU20049-UW2J
40 x 4	5 x 7 Dots	190 x 54 x 21	137.4 x 23.2	2.1 x 4.9	0.29 x 0.48	-40 - 85	-50 - 85	5	286-1065-ND	225.04	208.17	168.78	CU40045-UW1J

Graphics Vacuum Fluorescent Display Modules

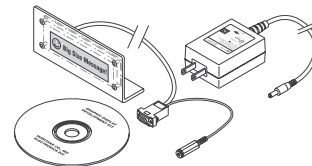
GUD3000/7000 Graphic Development Kits:

Prepares development strategy for the Noritake 3000 or 7000 Series from your Windows PC using the GUD3000 or GUD7000 development kit.

Complete Development Kit Includes:

- GUD3000 256 x 64 or GUD7000 140 x 32 Graphic Display and stand, assembled.
- Serial Signal/ Power wire harness (RS-232 interface)
- Power Supply
- CD with application

GUD3000/GUD7000



No. of Dots	No. of Characters	Dot Pitch (mm)	Display Area W x H (mm)	PCB Size W x H (mm)	Power (V/mA) (All Dots On)	Operating Temperature (°C)	Digi-Key Part No.	Price Each			Noritake Part No.
								1	10	50	
128 x 32	4 x 21	0.45 x 0.44	57.45 x 13.93	98 x 131	5.0/400	-40 - 85	286-1046-ND	99.88	92.39	74.91	GU128X32D-7000
128 x 32	4 x 21	0.45 x 0.44	57.45 x 13.93	98 x 131	5.0/400	-40 - 85	286-1047-ND	96.00	88.80	72.00	GU128X32D-7002
128 x 32	4 x 21	0.45 x 0.44	57.45 x 13.93	98 x 131	5.0/400	-40 - 85	286-1048-ND	99.72	92.25	74.79	GU128X32D-7003
128 x 32	4 x 21	0.65 x 0.65	83.05 x 20.65	130 x 38.5	5.0/450	-40 - 85	286-1059-ND◆	148.58	137.44	111.44	GU128X32-800B
128 x 64	8 x 21	0.65 x 0.65	83.05 x 41.45	140 x 68	5.0/750	-40 - 85	286-1023-ND	164.40	152.07	123.30	GU128X64-800A
128 x 64	8 x 21	0.65 x 0.65	83.05 x 41.45	140 x 68	5.0/750	-40 - 85	286-1060-ND◆	176.08	162.88	132.06	GU128X64-800B
128 x 64	4 x 8	0.45 x 0.45	57.45 x 28.65	99 x 49	5.0/760	-40 - 85	286-1066-ND◆	118.98	110.06	89.24	GU128X64D-7000
160 x 16	2 x 26	0.65 x 0.95	103.85 x 15	154 x 39	5.0/400	-40 - 85	286-1025-ND	157.56	145.75	118.17	GU160X16-800A
160 x 32	4 x 26	0.635 x 0.635	101.45 x 20.17	154 x 45	5.0/550	-40 - 85	286-1061-ND◆	164.84	152.48	123.63	GU160X32-800B
192 x 16	2 x 32	0.75 x 0.75	143.8 x 11.8	200 x 33.5	5.0/450	-40 - 85	286-1024-ND◆	169.24	156.55	126.93	GU192X16-800A
256 x 32	4 x 42	0.65 x 0.65	166.25 x 20.65	220 x 50	5.0/750	-40 - 85	286-1027-ND◆	180.72	167.17	135.54	GU256X32-800A
256 x 64	8 x 42	0.65 x 0.65	166.3 x 41.50	222 x 78	5.0/2,000	-20 - 70	286-1010-ND◆	374.40	346.32	280.80	GU256X64-372
256 x 64	8 x 42	0.65 x 0.65	166.25 x 41.45	230 x 78	5.0/1,500	-40 - 85	286-1040-ND◆	296.64	274.40	222.48	GU256X64-900A
256 x 64	16 x 32†	0.45 x 0.45	115 x 28.65	159 x 50	5.0/850	-40 - 70	286-1043-ND◆	201.50	186.39	151.13	GU256X64D-3900
112 x 16	2 x 16	0.47 x 0.725	52.50 x 11.45	80 x 36	5.0/260	-40 - 85	286-1030-ND◆	59.34	54.89	44.51	GU112X16G-7000
112 x 16	2 x 16	0.47 x 0.725	52.50 x 11.45	80 x 36	5.0/260	-40 - 85	286-1032-ND◆	56.24	52.03	42.18	GU112X16G-7003
140 x 16	2 x 20	0.5 x 0.725	69.85 x 11.45	116 x 37	5.0/290	-40 - 85	286-1033-ND◆	64.28	59.46	48.21	GU140X16G-7000
140 x 16	2 x 20	0.5 x 0.725	69.85 x 11.45	116 x 37	5.0/290	-40 - 85	286-1035-ND◆	61.20	56.61	45.90	GU140X16G-7003
140 x 16	2 x 23	0.735 x 1.185	102.75 x 18.8	146 x 43	5.0/650	-40 - 85	286-1049-ND	104.66	96.82	78.50	GU140X16J-7000
140 x 16	2 x 23	0.735 x 1.185	102.75 x 18.8	146 x 43	5.0/650	-40 - 85	286-1051-ND◆	99.72	92.25	74.79	GU140X16J-7003
140 x 32	4 x 20	0.5 x 0.68	69.85 x 21.61	98 x 60	5.0/400	-40 - 85	286-1036-ND◆	99.92	92.43	74.94	GU140X32F-7000
140 x 32	4 x 20	0.5 x 0.68	69.85 x 21.61	98 x 60	5.0/400	-40 - 85	286-1038-ND◆	94.98	87.86	71.24	GU140X32F-7003
280 x 16	2 x 46	0.49 x 0.70	137.05 x 11.0	182 x 33.5	5.0/520	-40 - 85	286-1052-ND	100.94	93.37	75.71	GU280X16G-7000
280 x 16	2 x 46	0.49 x 0.70	137.05 x 11.0	182 x 33.5	5.0/520	-40 - 85	286-1053-ND	97.00	89.73	72.75	GU280X16G-7002
280 x 16	2 x 46	0.49 x 0.70	137.05 x 11.0	182 x 33.5	5.0/520	-40 - 85	286-1054-ND	96.00	88.80	72.00	GU280X16G-7003
256 x 64	8 x 42	0.325 x 0.325	83.08 x 20.68	133 x 38	5.0/430	-40 - 85	286-1055-ND	201.50	186.39	151.13	GU256X64C-3900
256 x 64	4 x 16	0.45 x 0.45	115.05 x 28.65	159 x 50	5.0/330	-40 - 85	286-1067-ND◆	144.62	133.78	108.47	GU256X64D-7000
256 x 128	16 x 42	0.325 x 0.325	83.08 x 41.48	131 x 66	5.0/850	-40 - 85	286-1056-ND◆	273.64	253.12	205.23	GU256X128C-3900
256 x 128	16 x 42	0.45 x 0.45	115.05 x 57.45	170 x 90	5.0/1,200	-40 - 85	286-1057-ND◆	371.18	343.35	278.39	GU256X128D-3900
256 x 128	16 x 42	0.55 x 0.55	140.65 x 70.25	214 x 110	5.0/100	-40 - 70	286-1058-ND	447.62	414.05	335.72	GU256X128E-3900
Graphics Development Kit Without Display							286-1015-ND◆	200.00	185.00	150.00	GUD-ND
Graphics Development Kit for 3000 Series							286-1041-ND◆	303.14	280.41	227.36	GUD3000
Graphics Development Kit for 7000 Series							286-1042-ND◆	184.02	170.22	138.02	GUD7000

† Also available in 6 x 8 and 8 x 16 depending on font size ◆ RoHS Compliant

More Product Available Online: www.digikey.com

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