

technical specifications

autostereoscopic 3D display demonstrator

D089WQXL

V0.61 / 04.06.2019



records of revision

revision	date	revised	note
0.61	2019-05-22	Sigwart	preliminary / 4.6.: corrected version number

1 General

The D089WQXL is a prototypic demonstrator device of an autostereoscopic 3D-Display in landscape format that provides spatial visualization without the need of glasses. To achieve spatial visualization, the 3D-Display needs to be driven with content that is prepared in special way.

following versions are available:

- D089WQXMLM05R070A-NAA

2 Intended field of usage

The device is designed to demonstrate the effect and the quality of 3D Global's autostereoscopic 3D technology on an 8,9" sized sample display. Since this device is a prototypical setup, no commercial certifications (such as CE) have been realized, thus the device is intended for demonstration purposes only and shall not be sold as a commercial product.

3 Display specifications

Parameter	Value	Unit	Note
display size	22,6 (8,9") diagonal	cm	-
active area	192 (H) x 120 (V)	mm	-
native pixel count	2560 (H) x 1600 (V)	pixel	WQXGA
native pixel alignment	1 pixel =R+G+B subpixel vertical stripe	-	-
front surface	no protection lenticular aligned towards user	-	for model number <i>D089WQXLM05R070A-NAA</i>

4 Optical specifications

Parameter	Value	Unit	Note
max. brightness	250 (typ.)	cd/m ²	average of 5 points see note 4-1 see note 4-2
contrast ratio	1000:1 (typ.)	-	see note 4-1 see note 4-2
number of 3D views	5	-	for model number <i>D089WQXLM05R070A-NAA</i>
optimal 3D viewing distance	70	cm	for model number <i>D089WQXLM05R070A-NAA</i>
width of each 3D zone	approx. 26	cm	measured in ideal viewing distance
viewing angle horizontal	+60 / -60 (typ.)	deg	-
viewing angle vertical	+60 / -60 (typ.)	deg	-
native color depth per color	8	bit	16,7 M colors

optical characteristics measured in dark environment after 30 minutes of operation

PWM duty = 100%

Note 4-1

Refer to specification of underlying LCD-panel for details

Note 4-2

All views driven identical with 100% white

5 Electrical specifications

Parameter	Value	Unit	Note
power input	5	VDC	micro USB socket
power consumption	10 (typ)	W	-
signal input	HDMI	-	-

6 Mechanical specifications

Parameter	Value (approx)	Unit	Note
device outer dimensions	200 x 135 x 20	W x H x D (mm)	w/o cable w/o stand
device weight	230	gram	w/o cable w/o stand
wooden stand outer dimensions	200 x 115 x 20	L x W x H (mm)	display slot tilt by approx 30°
wooden stand weight	325	gram	-

7 Environment Specifications

Parameter	Value	Unit	Note
ambient temperature for storage	-20 - +60	°C	-
ambient temperature for operation	0 - +50	°C	-
ambient humidity	85% RH max. at Ta ≤ +40°C No condensation		

8 Miscellaneous

Parameter	Value (approx..)	Unit	Note
package outer dimensions	TBD	W x H x D (mm)	-
package weight	TBD	gram	-
delivered items	<ul style="list-style-type: none"> • Display device • USB Power cable (1,0m) • HDMI signal cable (1,8m) 	-	-

9 MPV 3D Player configuration

If the display is used with 3D Global's MPV 3D Player, please use the configuration file with

config code

05R