

technical specifications

autostereoscopic 3D display demonstrator

D055WQHP

Rev. 1.21 / 04.06.2019



records of revision

revision	date	revised	note
1.0	2019-04-26	Sigwart	initial release
1.1	2019-04-29	Sigwart	typos corrected / accessories added
1.21	2019-05-22	Sigwart	added #9 config code / 4.6.: corrected version number

1 General

The D055WQHP is a prototypic demonstrator device of an autostereoscopic 3D-Display in portrait 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:

- D055WQHPM05O070A-TAA

2 Intended field of usage

The device is designed to demonstrate the effect and the quality of 3D Global's autostereoscopic 3D technology on a 5,5" sized portrait format 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	13,9 (5,5") diagonal	cm	-
active area	68,04 (H) x 120,96 (V)	mm	-
native pixel count	1440 (H) x 2560 (V)	pixel	WQHD
native pixel alignment	1 pixel =R+G+B subpixel vertical stripe	-	-
front surface	multi-touch surface	-	for model number <i>D055WQHMP050070A-TAA</i>

4 Optical specifications

Parameter	Value (approx.)	Unit	Note
max. brightness	225 (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>D055WQHMP05N070A-TAA</i>
optimal 3D viewing distance	70	cm	for model number <i>D055WQHMP05N070A-TAA</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	3,5 (typ.)	W	-
signal input	HDMI	-	-
Touch interface	USB type A plug (fixed 0,5m wire)	-	-

6 Mechanical specifications

Parameter	Value (approx.)	Unit	Note
device outer dimensions	95 x 152 x 24	W x H x D (mm)	w/o cable
device weight	230	gram	w/o cable

7 Environment Specifications

Parameter	Value	Unit	Note
ambient temperature for storage	-20 - +60	°C	-
ambient temperature for operation	0 - +50	°C	-
ambient humidity	95% RH max. at Ta ≤ +40°C No condensation		

8 Miscellaneous

Parameter	Value (approx..)	Unit	Note
package outer dimensions	210 x 155 x 80	W x H x D (mm)	-
package weight	400	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

050