Environmental Test

TEST UNIT AND EQUIPMENT:

GU160x32D-K610A8 prototype 1 built 30-Nov-06 was tested on 1-Dec to 5-Dec, 2006.

Weiss WKL 100 Environmental Chamber serial 2200499200 calibrated 11-May-2006. Shaffner NSG435 ESD simulator PA0138 uncalibrated. Agilent E4402B spectrum analyser PA0193 calibrated 7-Nov-2006.

OPERATING CONDITION:

VCC = 5V, GND = 0V Module powered in Self Test mode

TEMPERATURE RANGE:

The module was brought to temperature in the Weiss-Technik chamber and stabilised for the specified time at each temperature before being powered on in self-test mode. Then visual quality of the display was inspected.

Temp	Duration	Observation
-40C	1hour	Off, storage
-40C	30mins	Operating, OK
+85C	12hours	Off, storage
+85C	30mins	Operating, OK

ELECTRO-STATIC DISCHARGE (Method IEC 6100-4-2):

The module was powered up in self-test mode on the test table. There it was exposed to contact and air discharges applied to the ribbon cable across the module face, the horizontal conductive plane under the module, and the vertical conductive plane.

Observation	Contact Discharge	Air Discharge
Lowest voltage discharged	1kV	8kV
Temporary spurious ON/OFF of pixels	None	None
Module reset or lock-uo	None	None
Permanent damage	None	None
Highest voltage discharged	9kV	16kV

CONDUCTED RF EMISSION TEST:

The 50-ohm input of the Agilent E4402B spectrum analyser was AC-coupled to the 5V supply of the module. While the module performed self-test, the spectra shown overleaf were taken:

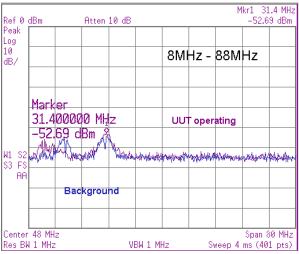
Start	Stop	Spectra	Significant UUT peaks
50 kHz	2050 kHz	UUT	-40dBm @210kHz, -50dBm @420kHz
1 MHz	11 MHz	UUT	None
8 MHz	88 MHz	UUT, background	-55dBm @13MHz
80 MHz	280 MHz	UUT, background	None
0.2 GHz	3 GHz	UUT	None

Subject to change without notice. IUK Doc Ref: 10844 Iss:1 15Feb08

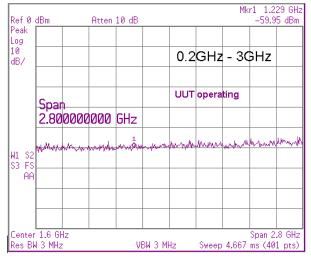
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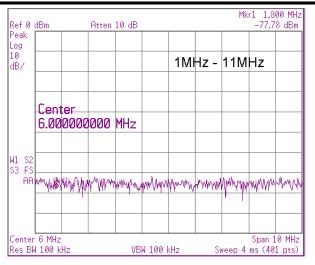
Environmental Test

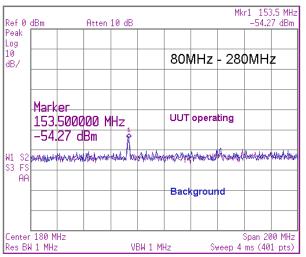
Mkr1 210 kHz Ref 0 dBm Atten 10 dB -40.5 dBm Peak Log 10 50kHz - 2050kHz dB/ Marker 210.000 kHz 40.5 dBm W1 S2 UUT operating \$3 FS AA MANAMAN MANAMAN Πm Center 1.05 MHz Span 2 MHz Res BW 10 kHz Sweep 25.77 ms (401 pts) VBW 10 kHz



Peak at 31.4MHz is local interference, not associated with Unit-under-test.







Peaks 130MHz – 170MHz are local interference (ship-to shore), not associated with Unit-under-test.

CONTACT

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