



6222 Video Dragon

Grabbing and generation of video data



- grabbing and generation of video data in one device
- test of display and/or camera systems
- modular design, consisting of base board and configurable media interface
- easy adaptation to different serialisers/deserialisers
- support of GMSL, FPD Link and APIX standards for image data
- sideband communication via UART, I2C, SPI or MII depending on Media Interface
- pass through of data streams (insertion into existing systems without influencing them)
- available as:

<i>stand-alone box</i>	<i>G CAR 6222 Video Dragon</i>
<i>PCIe card</i>	<i>G PCIe 6222 Video Dragon</i>
<i>PXIe card</i>	<i>G PXIe 6222 Video Dragon</i>



Parameter	
video format	RGB, YUV and RAW
digital I/O	2 x digital input, 2 x digital output
options	CAN FD Interface, CAN over UART
Host Interface G CAR 6222 Video Dragon	1 GBit Ethernet and USB 3.0
Host Interface G PCIe 6222 Video Dragon G PXle 6222 Video Dragon	4 x PCIe 2.1
temperature range	0–50 °C

Application

- test of display and/or camera systems
- sideband communication
- insertion into existing systems without influencing them

Performance

- MPSoC with Quad Core ARM Cortex-A53 and FPGA
- real time operating system
- lowest latencies
- additional digital I/Os

Available Media Interfaces excerpt

transmission standard	Media Interface	
GMSL	MI 6222 MAX9295A_4x Coax	MI 6222 MAX9295A_96A Coax
	MI 6222 MAX9296A_4x Coax	MI 6222 MAX9295A_96A STP
	MI 6222 MAX96714_4x Coax	
FPD-Link	MI 6222 DS90UB940_2x STP	MI 6222 DS90UB940_2x Coax
	MI 6222 DS90UB953_4x Coax	MI 6222 DS90UB954_4x Coax
	MI 6222 DS90UB947_948 STP	
APIX	MI 6222 INAP562T_562R STP	

Software

- G API for Windows and Linux/Linux RT
- LabVIEW Vis
- Dragon Suite* as intuitive user software

*basic version included free of charge

Modularity

- high flexibility regarding individual configuration
- support of all current serializers/deserializers
- sideband communication
- configurable media interfaces

Overview Connectors excerpt

Samtec ERI8-019	
FAKRA mini	
HSD	
FAKRA	
FAKRA mini double	



Overview Cables excerpt

			
Video cable Coax	Connection cable between Video Dragon and G Patch	Connection cable CAN and digital I/O	HSD cable

G Patch

- adaptation of the DUT
- power supply of the DUT
- special functions

Overview G Patch excerpt

G Patch 6222 Coax variant 2.1			
G Patch 6222 Coax variant 1			
G Patch 6222 STP variant 2			

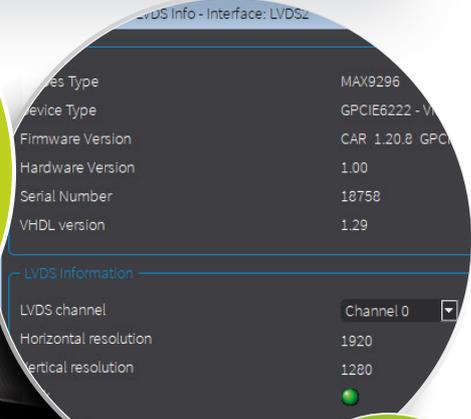
Dragon Suite Basic vs. Dragon Suite Advanced

Category	Sub category	basic	advanced
configuration generator/ grabber	basic configuration	x	x
	Media Interface GPIO configuration		x
grabber dialogue	basic functions	x	x
	advanced colour format conversion (Bayer, Grey 8 and 12 Bit, YUYV-UYYV 8+10 Bit)		x
	RAW recording		x
generator dialogue	simultaneous generation on several channels		x
	advanced pattern generator		x
	video output or mirrored desktop	x	x
sideband dialogue	UART, I2C, SPI (MII only in Advanced available)	x	x
monitor functions	CAN monitor and sideband (SPI, I2C, UART, MII)		x
	support of the following interfaces		
support of the following interfaces	read/write digital I/Os	x	x
	trigger settings	x	x
	Sequence Interface, Script Interface, CAN Interface		x

Overview of the interfaces

Functions

- monitoring of sideband communication
- recording of raw data (multi-channel streaming with time stamps and meta information)
- convenient editing functions for defining and outputting test patterns



LVDS status display

Dialogue window Frame Grabber



Made in Germany



ISO 9001 certified

GÖPEL electronic GmbH

Goeschwitzer Str. 58/60
07745 Jena · Germany

+49 3641 · 6896 0 Phone
+49 3641 · 6896 944 Fax

ats.sales@goepel.com
www.goepel.com

ats.sales@goepel.co.uk

ats.sales@goepelusa.com

ats.sales@goepel.asia

ats.sales@goepel.in



910202