

# MODEL A223803

## KEY FEATURES

- Option module for Chroma 2238 Video Pattern Generator
- Supports analog frequencies up to 300 MHz
- S-Video / CVBS / RGB / Component port
- NTSC / PAL / SECAM signal
- Closed Caption (NTSC)
- V-Chip (NTSC)
- Teletext (PAL)
- YPbPr / Y、R-Y、B-Y / ITU601 / ITU709 / RP177 / SMPTE 240M component video output
- ESD protection
- EDID reading / writing / comparing / analysis



## ANALOG SIGNAL MODULE MODEL A223803

Chroma Analog Signal Module A223803 features standard analog video signal output functions and supports VGA, CVBS, Y/C signal interfaces for various testing applications. With regards to analog signals, RGB (D-Sub) is available to output a variety of standard signal formats for traditional analog interface testing applications. In terms of TV output signal, the module complies with NTSC, PAL, and SECAM specifications. In addition, the VPG Master software enables convenient editing of test procedures and parameters. Its user-friendly interface and comprehensive test functions enables users to tailor test programs to each DUT's specific requirements, and carry out automated testing of a wide variety of video products with the tap of a button.

### VGA Analog Signal Output

For the RGB output of the VGA (Video Graphics Array) analog signal, the A223803 follows the VESA VSI v1.1 specification and conforms to RS-343a, RS-170 and VESA signal standards, with a pixel rate of 300MHz, and a maximum supported display resolution of 2560x1600 (WQXGA). The VGA interface supports YPbPr / Y, R-Y, B-Y / ITU601 / ITU709 / RP177 / SMPTE 240M formats, while Image Scanning Mode supports Interlaced and Non-interlaced logic combinations.

### TV Analog Signal Output

The A223803 provides a variety of standard TV signal outputs and BNC/S-Video output ports, complies with NTSC, PAL, SECAM specification signals, and supports CVBS and Y/C split signal formats to test a variety of specialized TV functions, such as Closed Caption, V-Chip and Teletext.

### YPbPr Analog Signal Output

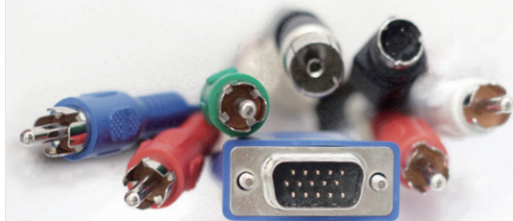
The YPbPr component port adopts the American Electronics Industry Association's EIA-770.2a standard, meeting the requirements of high-quality video transmission which the color component interface is designed to facilitate. The design makes intelligent use of the fact that the human eye is more sensitive to brightness than to chromaticity, which makes it difficult to see the difference between the processed image and the original image. Signal Scanning Mode supports: Interlaced, Non-interlaced, EQP, SERR and other logic combinations, as well as SD and HD display resolutions.

### EDID Testing Function

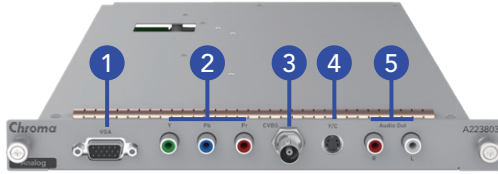
EDID (Extended Display Identification Data) is a VESA-defined data standard for identifying DDC displays. Using I<sup>2</sup>C, the A223803 directly reads, compares and writes to the EDID register inside the display, which includes supplier information, image size, color setting, and frequency range, providing configuration data to the signal source. Users can edit the EDID through a software interface and display the complete analysis results.

### Convenient and Fast Functionality

The A223803 can be combined with the Chroma 2238 Video Pattern Generator's full-color graphical human-machine interface. With the Instant Pattern View function, the user can browse and edit test patterns directly on the device or choose from a wide selection of built-in test patterns, such as EDID, static 3D pattern, and China HD test image, providing easy and fast test appraisal. The pre-installed program helps to save time, increase production capacity and reduce costs. The easy-to-use interface and comprehensive test functions serve many applications such as research and development, production testing and quality assurance in all video and related industries.



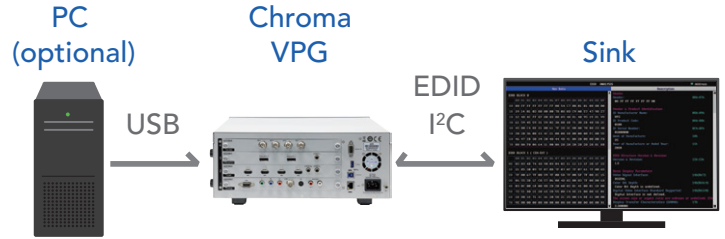
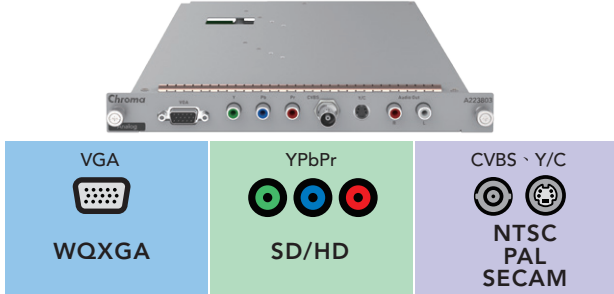
## PANEL DESCRIPTION



### Analog Signal Module

1. VGA Port
2. YPbPr Port
3. CVBS Port
4. Y/C Port (S-Video)
5. Audio Output(R/L)

## APPLICATIONS



### Supports various analog signals

- VGA maximum supported frequency of 300MHz
- BNC / S-Video supports testing of specific TV functions: Teletext, Closed Caption and V-chip
- Image Scanning Mode supports Interlace and Non-interlace logic combinations

### EDID (Extended Display Identification Data)

- EDID testing functionality
- Supports reading / writing / comparing / analysis
- Provides real-time DUT analysis

## SPECIFICATIONS

Analog Signal Module A223803	
Analog Output	
Pixel Rate Range	Max. 300 MHz
Video Signal	R \ G \ B (75 ohms)
Video Level	0~1.0V, 1 mV/step
White Level	0~1.2V, 1 mV/step
Black Level	7.5 IRE / 0 IRE programmable
Sync Level	0~0.5V, 1 mV/step
Sync on Green	On / Off programmable
Rise/fall Time	1.6nS (typical), 2.0nS (max.)
Separate Sync	Hs / Vs / Xs
Video Format	R \ G \ B / RS-343A / RS-170 / VESA Y \ R-Y \ B-Y Y \ Pb \ Pr / ITU601 \ ITU709 \ RP177 \ SMPTE240M
EDID	Version 1.3 Read / Write / Compare / Edit / Analysis
Signal Compliant	VSIS v1.1

TV Output	
Output Mode	NTSC \ PAL \ SECAM
Close Caption (NTSC)	C1 / C2 / C3 / C4 T1 / T2 / T3 / T4
V-Chip (NTSC)	MPAA : G / PG / PG-13 / R / NC-17 / X FCC : TV-Y / TV-Y7 / TV-G / TV-PG / TV-14 / TV-MA Canada English : C / C8+ / G / PG / 14+ / 18+ Canada France : G / 8ans+ / 13ans+ / 16ans+ / 18ans
Teletext (PAL)	System B Level 1, 1.5

Audio	
Channel	2 channels (R,L)
Sample Rate	32 \ 44.1 \ 48 \ 88.2 \ 96 \ 176.4 \ 192 KHz
Amplitude	0V ~ 2V, 50 mV/step (at 600 Ohms load)
Frequency	10 Hz ~ 20 KHz , 1 Hz / step
T.H.D	0.2 %
Output waveform	Sin wave
Special Control Mode	Tone / Sweep / Mute / Repeat / Play Time

Other	
Connector	D-Sub 15 pin x 1 (Analog RGB) RCA x 3 (Component) BNC x 1 / YC x 1 (TV) RCA x 2 (Audio)
Dimensions (H x W x D)	25 x 232 x 300 mm
Operating Temperature	+5 ~ +40°C
Storage Temperature	-20 ~ 60°C
Humidity	20 ~ 90%
Weight	< 2 kgs

\*All specifications are subject to change without prior notices.

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HEADQUARTERS  
CHROMA ATE INC.  
88 Wenmao Rd.,  
Guishan Dist.,  
Taoyuan City  
333001, Taiwan  
T +886-3-327-9999  
F +886-3-327-8898  
www.chromaate.com  
info@chromaate.com

U.S.A.  
CHROMA ATE, INC.  
(U.S.A.)  
7 Chrysler, Irvine,  
CA 92618  
T +1-949-421-0355  
F +1-949-421-0353  
Toll Free +1-800-478-2026  
www.chroma.us.com  
info@chromaus.com

EUROPE  
CHROMA ATE EUROPE B.V.  
Morsestraat 32,  
6716 AH Ede,  
The Netherlands  
T +31-318-648282  
F +31-318-648288  
www.chroma.eu.com  
salesnl@chromaeu.com

CHROMA GERMANY GMBH  
Südtiroler Str. 9, 86165,  
Augsburg, Germany  
T +49-821-790967-0  
F +49-821-790967-600  
www.chroma.eu.com  
salesde@chromaeu.com

JAPAN  
CHROMA JAPAN  
CORP.  
888 Nippa-cho,  
Kouhoku-ku,  
Yokohama-shi,  
Kanagawa,  
223-0057 Japan  
T +81-45-542-1118  
F +81-45-542-1080  
www.chroma.co.jp  
info@chroma.co.jp

KOREA  
CHROMA ATE  
KOREA BRANCH  
3F Richtogether  
Center, 14,  
Pangyojeok-ro 192,  
Bundang-gu,  
Seongnam-si,  
Gyeonggi-do  
13524, Korea  
T +82-31-781-1025  
F +82-31-8017-6614  
www.chromaate.co.kr  
info@chromaate.com

CHINA  
CHROMA ELECTRONICS  
(SHENZHEN) CO., LTD.  
8F, No.4, Nanyou Tian  
An Industrial Estate,  
Shenzhen, China  
T +86-755-2664-4598  
F +86-755-2641-9620  
www.chroma.com.cn  
info@chromaate.com

SOUTHEAST ASIA  
QUANTEL PTE LTD.  
(A company of Chroma Group)  
25 Kallang Avenue #05-02  
Singapore 339416  
T +65-6745-3200  
F +65-6745-9764  
www.quantel-global.com  
sales@quantel-global.com