

# VTV2000IS

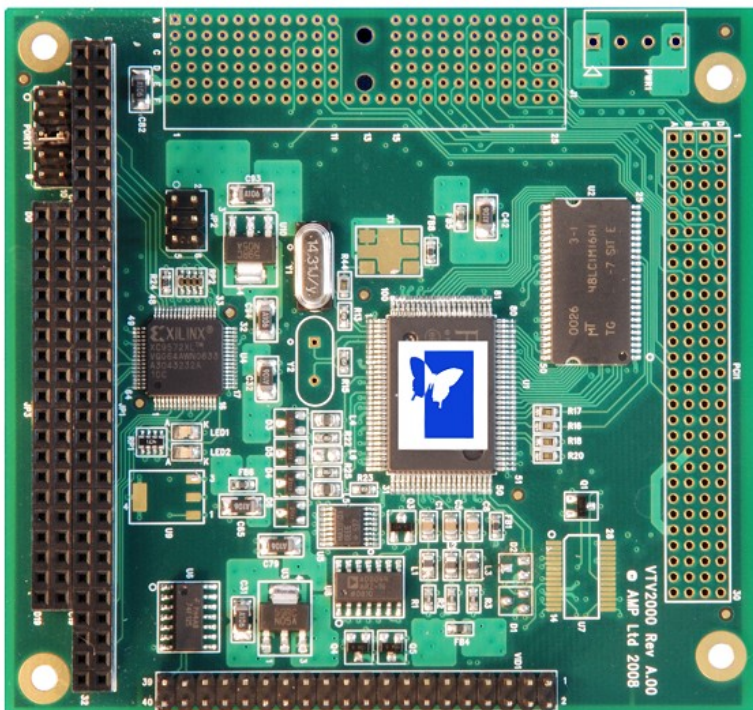
## Intelligent VGA-to-RS170 Converter



**Advanced Micro  
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The VTV2000IS is a scan converter board that accepts non-interlaced VGA signals at up to 2048x1536 resolution from a PC or Macintosh computer for conversion to broadcast-quality NTSC or PAL RS170/TV signals.



Full Stand-alone  
operation

Unlike conventional scan converters, the VTV2000IS features on-board Frame Store and a DSP unit which performs scan conversion, flicker filtering, scaling and colour space conversion in the digital domain.

The processed video data is sent to the digital video encoder for conversion into broadcast-quality composite and S-Video signals (PAL/NTSC) or RS170.

### PRELIMINARY INFORMATION (Rev A.00)

Subject to change without notification

**Advanced Micro Peripherals Ltd**  
Cambridge, CB6 2HY, England  
Tel (+44) 1353 659500  
Tel (+44) 1353 659600  
[sales@amp ltd.com](mailto:sales@amp ltd.com)  
<http://www.amp ltd.com>

**Advanced Micro Peripherals Inc**  
New York, NY10001, USA  
Tel (+1) 212 951 7205  
Tel (+1) 212 951 7206  
[sales@amp-usa.com](mailto:sales@amp-usa.com)  
<http://www.amp-usa.com>



# VTV2000IS

## Intelligent VGA-to-RS170 Converter

The VTV2000IS features an board micro controller allowing it to operate completely standalone without run-time control from an external system. The settings of the card can be modified via a serial link, with application specific configuration able to be stored to the non-volatile storage of the card. Configuration utilities are available for Windows/ Linux/QNX.

### Features

- Converts Computer VGA to PAL/NTSC
- Composite PAL or NTSC Output
- Broadcast TV Quality
- RS170 Composite output
- Supports up to 2048x1526 VGA resolution
- Simultaneous display on VGA and TV
- On-board MPU
- Persistent settings
- Compact 3.6" by 3.8" board
- Complete stand-alone operation no host computer required
- Single +5V Power Supply

### Applications

- Aerospace Instrumentation
- Instrument Panel
- Video Surveillance
- Embedded Multimedia

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**Advanced Micro Peripherals Inc**  
New York, NY10001, USA  
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Tel (+1) 212 951 7206  
[sales@amp-usa.com](mailto:sales@amp-usa.com)  
<http://www.amp-usa.com>



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THE EMBEDDED VIDEO EXPERTS

Computer

VGA to

broadcast

quality

PAL/NTSC/RS170

Composite

Output



**Analogue Video Input**

Progressive RGB, HSync, VSync from VGA device  
Triple 8-bit digitization  
Up to 2048 x 1536 VGA Input Resolution

**Analogue Video Output**

10-bit Digital-to-Analogue conversion  
Supported output standards:  
CCIR601-NTSC  
RS170  
CCIR-PAL  
PAL-B, PAL-G, PAL-H, PAL-I  
Composite or S-Video

**Video Output Adjustments**

Contrast (or luma gain) adjustable from 0 - 200% of original  
Saturation (or chroma gain) adjustable from 0 - 200% of original  
Sharpness (or edge enhancement) adjustable over 16 steps  
Brightness (or luma level) can be adjusted from 0 - 255 steps

**Serial Interface**

Standard RS232 port

**System Requirements**

RS232 link for configuration only

**Miscellaneous**

Single +5V at less than 2.75W  
Operating Temp of 0 to 60degC  
Extended Temperature -40 to +85degC (option)  
Compact 3.6 x 3.8in form factor

**Software**

Configuration software for Windows-NT/2000/XP, Linux. QNX

**Ordering Information**

Std Temp (0 to +60degC)  
**VTV2000IS-CP** PAL Output  
**VTV2000IS-CN** NTSC/RS170 Output  
 Ext Temp (-40 to +85degC)  
**VTV2000IS-CP-Ext** PAL Output  
**VTV2000IS-CN-Ext** NTSC/RS170 Output

