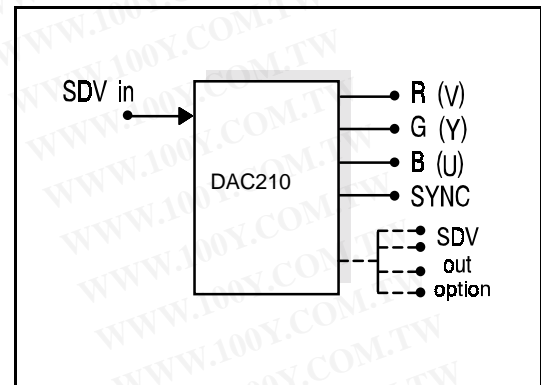


DAC210 Modules

Serial Digital to Analogue RGB/YUV

- **Broadcast Quality Performance**
- **Multiple output capability**
- **Unique Clock Regenerator circuitry**
- **Blank to analogue line length**
- **Up to six cards in a single 1U frame**

These modules are part of our Series 200 range and are intended for broadcast quality applications. They offer a high level of features, with excellent specifications and performance. The conversion is performed to 10 bit resolution with a choice of either full 601, or near 601 filters (for single pass applications).



The circuitry on the DAC210 modules contain a unique digital clock regenerator which removes distortion caused by jitter, giving a cleaner analogue output. This output is switchable between YUV/RGB. The module accepts both 525 or 625 line standards and can be set to automatically switch between them. For 525 (NTSC) applications there is the option to put set-up on the analogue signal. The DAC210 modules can also be set to blank to analogue video line length. This is a shaped blanking and is often needed as the digital line length is longer than the analogue one. There is also the option to pass or blank the VBI lines.

For Low cost, monitoring applications, we offer the DAC211M. See separate datasheet.

Input: 270Mb/s serial digital to EBU Tech. 3267-E & SMPTE 259M
 625 and 525 line standards

Outputs: Analogue YUV or RGB (selectable), 700mV into 75R and mixed syncs, 2V p-p
 Sync on Green selectable
 2nd set of outputs available (see options)
 Reclocked serial digital video (see options).

Specifications: 10 bit conversion with high performance seperated DAC's. Full Broadcast reconstruction filters are fitted as standard, complying with Rec 601
 Frequency response Y = 5.75MHz and UV=2.75 (+/- 0.1dB) for full 601 filters
 Differential Phase<0.05deg
 Differential Gain <0.05%
 YUV to RGB matrix error <1%
 Crosstalk <-54dB
 Noise <-54dB
 Cr-Cb delay +/-5nS
 Y-Cr,Cb delay +/-5nS
 Group delay inequality <10nS (to 5.5MHz)

Physical: Power Consumption 8.5W approx
 Single Eurocard board, front loading desig

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|----------------------|---------|---|
| Product Codes | DAC210 | D to A, RGB/YUV output, 10 bit, full 601filtering |
| | DAC211 | D to A, RGB/YUV output, 10 bit, full 601filtering, 1 x SDV out |
| | DAC211D | D to A, two sets of RGB/YUV output, 10 bit, full 601 filtering, 1 x SDV out |
| | DAC214 | D to A, RGB/YUV output, 10 bit, full 601 filtering, 4 x SDV out |