Features

- **(M) NTSC and (B, D, G, H, I, M, N, N$_C$) PAL Operation**
  - **Optional Auto Detect of Video Standard**
  - **ITU-R BT.601 (CCIR601) and Square Pixel Operation**
- **Digital Output Formats**
  - **VMI Compatible**
    - **8-Bit, 16-Bit 4:2:2 YCbCr**
    - **15-Bit (5,5,5), 16-Bit (5,6,5) RGB**
      - **Linear or Gamma-Corrected**
  - **8-Bit BT.656**
- **Analog Input Formats**
  - **Three Analog Composite Inputs**
  - **Analog Y/C (S-Video) Input**
- **"Sliced" VBI Data Capture Capabilities**
  - **Closed Captioning**
  - **Widescreen Signalling (WSS)**
  - **BT.653 System B, C and D Teletext**
    - **NABTS (North American Broadcast Teletext)**
    - **WST (World System Teletext)**
- **2-Line (1H) Comb Filter Y/C Separator**
- **Fast I^{2}C Interface**
- **Two 8-Bit ADCs**

Applications

- **Multimedia PCs**
- **Video Conferencing**
- **Video Compression Systems**
- **Video Security Systems**
- **LCD Projectors and Overhead Panels**
- **Related Products**
  - **NTSC/PAL Encoders: HMP815x, HMP817x**
  - **NTSC/PAL Decoders: HMP8112A**
- **Related Literature**
  - **AN9644: Composite Video Separation Techniques**
  - **AN9716: Widescreen Signalling**
  - **AN9717: YCbCr to RGB Considerations**
  - **AN9728: BT.656 Video Interface for ICs**
  - **AN9738: VMI Video Interface for ICs**

Description

The HMP8115 is a high quality NTSC and PAL decoder with internal A/D converters. It is compatible with NTSC M, PAL B, D, G, H, I, M, N, and combination N (N$_C$) video standards.

Both composite and S-video (Y/C) input formats are supported. A 2-line comb filter plus a user-selectable chrominance trap filter provide high quality Y/C separation. User adjustments include brightness, contrast, saturation, hue, and sharpness.

Data during the vertical blanking interval (VBI), such as closed captioning, widescreen signalling and teletext, may be captured and output as BT.656 ancillary data. Closed captioning and widescreen signalling information may also be read out via the I^{2}C interface.

Ordering Information

PART NUMBER	TEMP. RANGE (^{o}C)	PACKAGE	PKG. NO.
HMP8115CN	0 to 70	80 Ld PQFP	Q80.14x20
HMPVIDEVAL/ISA	Evaluation Board: ISA Frame Grabber		

NOTES:

1. PQFP is also known as QFP and MQFP.

2. Evaluation Board and Reference Design descriptions are in the Applications section.

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