



## H.264 Video Codecs

# PureVu™ CNW36XX Super Low Latency Full-HD Video Codec

### Product Brief

#### FEATURES

##### Video Compression

- H.264 Baseline & Main Profile up to L4.2

##### Resolutions

- 1080p24/25/30/50/60, 1080i50/60
- 720p24/25/30/50/60
- 480i60, 480p24/30/60, 576i50, 576p25/50

##### Noise Reduction

- CA-MCTF

##### Error Resiliency & Concealment

- Intra-frame forcing
- Intra-refresh
- Variable GOP size
- Variable slice size
- Skip-frame
- Skip-macro block
- Decoder tolerant of missing or corrupt NAL units

##### Rate Control

- Constant bit rate control
- Variable bit rate control
- Fixed QP

##### Video Input and Output Ports

- 2 bi-directional video ports
- ITU-R BT.1120 & BT.656

##### Super Low Latency Technology™

- Sub 1ms 1080p60 encode-decode latency

##### Pre & Post-Processing

- Transsizing & transrating
- YUV 4:2:2 << 4:2:0 sample conversion
- Stream duplication
- OSD

##### Host Bus Interface

- 32/16-bit, 133 MHz sync/async host bus
- 32-bit, 33/66 MHz PCI 2.2 compatible bus
- On-chip PCI DMA

##### Encoder Configuration Support

- Frame rate
- Statistics
- GOP size
- CBR/VBR control
- Error resiliency & concealment
- Noise filtering
- Resolution

##### Network Support

- Encoder NAL bit stream formatting
- Decoder NAL bit stream parsing

##### Memory Interfaces

- 2x DDR2 -266 MHz interfaces
- SPI Serial FLASH interface

##### Miscellaneous Interfaces

- JTAG
- GPIO
- 12C

##### Operational Characteristics

- Core clock frequency 233 MHz
- Power dissipation 2.5W typical
- -40° – +85° C ambient temperature
- 0-90% RH

##### Package

- 676 pin BGA
- 27mm x 27mm

#### ORDERING INFORMATION

Device	Part Number	Streams		Video Ports		Host I/F	Memory	Package	RoHS
		HD	SD	No	Interface				
CNW3602	CNW3602-233BG676-Option Code	1x 1080p60 2x 1080p30 2x 1080i60 2x 720p60 4x 720p30	8x SD	2	BT.1120	PCI 32-bit, 33/66 MHz or 32-bit synchronous/asynchronous generic host I/F	2x 32-bit wide memory bus I/F DDR2 266 MHz	676 PBGA	Pb-free RoHS-6