

Digital video decoders & encoders for automotive/industrial applications

**NEW
SAF7115**

| Video Decoders | | | |
|---|-------------|-------------------------------|---------------------|
| Device | SAF7113 | SAF7115 | SAF7118 |
| Clock: | | | |
| Sample Rate | ITU-601 | 2xITU-601 | 2x ITU-601 |
| Real-Time Control-out (RTC) | √ | √ | √ |
| Audio Clock | | Frame or Field Locked | Field Locked |
| Input: | | | |
| Analog Inputs | 4 | 6 | 16 |
| Differential CVBS Inputs | | optional | |
| Analog-to-Digital Converters (ADCs) | 2 | 2 Low Noise | 4 Low Noise |
| ADC Resolution | 9-bit | 9-bit | 9-bit, Over-Sampled |
| Analog RGB/YPbPr Component Video Input | | | √ |
| SCART Support | | | √ |
| Video standards: | | | |
| NTSC/PAL/SECAM | √ | √ | √ |
| Standard Detection | √ | Fully Automatic | √ |
| Feature Processing: | | | |
| Adaptive 2/4-Line NTSC/PAL Comb Filter | | Enhanced Super-Adaptive | √ |
| Universal VBI Data Slicer | √ | √ | √ |
| I ² C VBI Read Back | | √ | |
| Square Pixel Output Rate | | Optional | |
| Fast Field Lock | | √ | √ |
| Automatic VCR Detection and Super Synchronization | | √ | |
| Scaler: | | | |
| Pixel Accurate H/V Scaler | | √ | √ |
| Output: | | | |
| Color Format | YCbCr-4:2:2 | YCbC-4:2:2r, including 10 bit | YCbCr-4:2:2 |
| Output Port | 8-bit | 8-bit 16-bit | 8-bit 16-bit |
| Expansion X-Port | | √ | √ |

| Video Encoders | |
|----------------------------|---|
| SAF7129A | Device |
| Clock: | |
| 2x ITU-601 | Sample Rate |
| √ | Real-Time Control-in (RTC) |
| √ | Master or Slave Clock Mode |
| Output: | |
| 6, programmable | Analog Outputs |
| 6 Double-term. Current | Digital-to-Analog Converters (DACs) |
| 10-bit, Over-Sampled | DAC Resolution |
| √ | Analog RGB/YPbPr Component Video Output |
| Video standards: | |
| √ | NTSC/PAL/SECAM |
| √ | Precision Subcarrier Generation |
| Feature Processing: | |
| √ | Cross-Color Reduction Filter |
| Including Teletext | Universal VBI Data Coding |
| √ | I ² C VBI Write |
| √ | Internal Color Bar Generator |
| √ | Fading of two datastreams |
| Input: | |
| YCbCr-4:2:2 | Color Format |
| 8-bit | Input Port |
| Optional | Two multiplexed ITU-R BT.656 streams |

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| Device | SAF7113 | SAF7115 | SAF7118 |
| General: | | | |
| Supply Voltage | 3.3V | 3.3V | 3.3V |
| I ² C Status Interrupt Pin | | | √ |
| Macrovision Detection | √ | √ | Enhanced 3-Level |
| Extended Temp Version | √ | √ | √ |
| PPAL Level 3 | √ | √ | |
| AEC-Q100 | | √ | |
| Package | QFP44 | HTQFP100, TFBGA160 | HBGA156, QFP160 |
| Availability | Production | Q3/2008 | Production |

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| General: | |
| 3.3V | Supply Voltage |
| | |
| | |
| √ | Extended Temp Version |
| √ | PPAL Level 3 |
| | |
| QFP44 | Package |
| Production | |