

# Digital Video Encoders

## for general applications

DEVICE	Recommended for New Designs				
	SAA7128/ SAA7129	SAA7102/ SAA7103	SAA7120/ SAA7121	SAA7128A/ SAA7129A/ SAF7129A	SAA7104/ SAA7105
<b>Input:</b>					
8-bit ITU-656	•	•	•	•	•
Dual Input Streams	•			•	
12-bit Multi-Format (VGA)		•			Including DVO
Video Resolution	Standard Definition	Up to 800 × 600 VGA	Standard Definition	Standard Definition	Up to 1280 × 1024 VGA, 1080i and 720p HD
<b>Output:</b>					
Number of DACs	6	3	3	6	3
DAC Resolution	10-bit	10-bit	10-bit	10-bit	10-bit
Type of DAC	Voltage	Current	Voltage	Current	Current
TV Detect					•
2 × Luma Over-Sampling Rate	•	•	•	•	•
Analog CVBS and S-Video	•	•	•	•	•
Analog Component RGB and YPbPr	•	•		•	•
Programmable RGB Output Levels	•			•	
Cross-Color Reduction Filter	•	•	•	•	•
HD Output 1080i, 720p					•
Pixel Accurate H/V Scaler		•			•
High Performance Flicker Filter		•			Enhanced
<b>Video Standards:</b>					
NTSC	•	•	•	•	•
PAL	•	•	•	•	•
SECAM	•			•	
<b>Macrovision* Copy Protection:</b>					
Version 7.1 and 6.1	SAA7128	SAA7102	SAA7120	SAA7128A	SAA7104
Version 1.03 (525p/625p)					SAA7104
<b>Text &amp; Graphics:</b>					
Teletext Insertion	•	•	•	•	•
Closed Caption (Line 21)	•	•	•	•	•
Color Bar Generator	•	•	•	•	•
Wide Screen Signalling	•	•	•	•	•
VPS (Video Program Service)	•	•		•	•
<b>General:</b>					
Supply Voltage	3.3 V	3.3 V	3.3 V	3.3 V	3.3 V
Fast I <sup>2</sup> C Bus (400 kHz)	•	•	•	•	•
Remote Genlock via RTC Input	•		•	•	QFP64
Package	QFP44	QFP44, BGA156	QFP44	QFP44	QFP64, BGA156
<b>Availability:</b>					
Extended Temp Version				SAF7129A	
Status	Production	Production	Production	Production	Production

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