



# **1Q 2012** **Product Selector Guide**

## Port Processors

Target Applications: HDTVs

Features	SiI9589-3*	SiI9587-3*	SiI9489A	SiI9387A	SiI9381A	SiI9287B	SiI9199
HDMI® Input	5	4	5	5	4	4	3
MHL™ Input	1	1	1	1	1		
HDMI Output	1	1	2	1	1	1	1
InstaPort™	InstaPort™ S	InstaPort™ S	InstaPort™ S	InstaPort™ S	InstaPort™ S	InstaPort™	
ViaPort			•				
Hardware HDCP Repeater			•				
300 MHz TMDS	•	•					
3D Support	•	•	•	•	•	•	•
Audio Return Channel	•	•	•	•	•		
HDMI Ethernet Channel			•	•			
Max HDMI Resolution	4k30p, 1080p120	4k30p, 1080p120	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)
Max MHL Resolution	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)		
x.v.Color Support	•	•	•	•	•	•	•
HDCP Decryption, HDCP BIST and Pre-programmed HDCP Keys	•	•	•	•	•	•	
CEC Processor			•	•	•	•	
Advanced Sleep Modes	•	•	•	•	•	•	•
Integrated NVRAM EDID for HDMI and VGA Port	•	•	•	•	•	•	
Package Size	100-pin TQFP	88-pin QFN	128-pin QFP	100-pin QFP	88-pin QFN	72-pin QFN	72-pin QFN
Starter Kit	CP9589-3	CP9587-3	CP9489	CP9387HDMI	CP9381A	CP9287HDMI	CP9199

\*Also available in 225 MHz versions

## HDMI Receivers

Target Applications: HDTVs

Features	SiI9223A	SiI9127
HDMI® Input	4	2
Display Interface	36-bit	36 bit
Max HDMI Resolution	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)
RGB, YCbCr Color Space Conversion	●	●
x.v.Color Support	●	●
HDCP Decryption, HDCP BIST and Pre-programmed HDCP Keys	●	●
CEC Processor	●	●
Integrated NVRAM EDID	4	2
Advanced Sleep Modes	●	●
2x I <sup>2</sup> S and S/PDIF Output	●	●
Slave I <sup>2</sup> C Interface	●	●
Auto Video/Audio Mode Detection	●	●
Package Size	144-pin TQFP	128-pin TQFP
Starter Kit	CP9223HDMI	CP9127HDMI

## iTMDS Transmitters

Target Applications: HDTVs

Features	SiI7172
Input (Single Pixel)	Up to 48-bit
Input (Dual Pixel)	Up to 72-bit
Video Resolution	VGA-UXGA, VGA-QUXGA (Dual)
Deep Color (iTMSD)	Up to 48 bit (16 bit/color)
HDCP Encryption and Pre-programmed HDCP Keys	●
Spread Spectrum Clocking	●
Advanced Sleep Modes	●
24-bit True Color Support in All Modes	●
Package Size	128-pin LQFP
Starter Kit	CP7181-7172, CP7189-7172

## iTMDS Receivers

Target Applications: HDTVs

Features	SiI7189	SiI7181	SiI7171
Display Interface	48-bit (1 pixel) 72-bit (2 pixels)	48-bit (1 pixel) 72-bit (2 pixels)	48-bit (1 pixel) 72-bit (2 pixels)
Video Resolution	VGA-UXGA, VGA-QUXGA (Dual)	VGA-UXGA, VGA-QUXGA (Dual)	VGA-UXGA (Single link)
Deep Color (iTMSD)	Up to 48 bit (16 bit/color)	Up to 48 bit (16 bit/color)	Up to 48 bit (16 bit/color)
HDCP Decryption and Pre-programmed HDCP Keys	●		
Advanced Sleep Modes	●	●	●
24-bit True Color Support in All Modes	●	●	●
Package Size	208-pin QFP	208-pin QFP	128-pin LQFP
Starter Kit	CP7189-7172	CP7181-7172	CP7171-7170, CP7171LCD

## Port Processors

*Target Applications: AVR, HTiB, Soundbar*

Features	SiI9575	SiI9573
HDMI <sup>®</sup> Input	6	6
MHL <sup>™</sup> Input	2	2
HDMI Output	2	2
InstaPort <sup>™</sup>	InstaPort <sup>™</sup> S	InstaPort <sup>™</sup> S
InstaPrevue	•	•
ViaPort Matrix Switch	•	
Hardware HDCP Repeater	•	•
300 MHz TMDS	•	•
3D Support	•	•
Audio Extraction	•	•
Audio Insertion	•	•
Audio Return Channel	•	•
On-Screen Display	•	•
Max HDMI Resolution	4k30, 1080p120	4k30, 1080p120
Max MHL Resolution	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)
x.v.Color Support	•	•
HDCP Decryption, HDCP BIST and Pre-programmed HDCP Keys	•	•
CEC Processor	•	•
Advanced Sleep Modes	•	•
Integrated NVRAM EDID for HDMI and VGA Port	•	•
Package Size	176-pin TQFP	176-pin TQFP
Starter Kit	CP9575HDMI	CP9575HDMI

## Input Processors

Target Applications: AVR, HTiB

Features	SiI9261
HDMI® Input	4
Analog Video Input	4x 12-bit ADC @ 170MSPS
Display Interface	36-bit
InstaPort™	InstaPort™
Max HDMI Resolution	1080p/60Hz, 36 bit (12 bit/color)
RGB, YCbCr Color Space Conversion	•
x.v.Color Support	•
HDCP Decryption, HDCP BIST and Pre-programmed HDCP Keys	•
CEC Support	•
Hot Plug Support	•
Advanced Sleep Modes	•
Integrated NVRAM EDID for HDMI and VGA Port	4
Repeater Support	•
S/PDIF Compressed Audio	•
Dolby® True HD, DTS-HD, SACD and DVD-audio	•
8-ch I²S Interface @ 192 kHz	•
Master I²C Interface	•
Package Size	208-pin LQFP
Starter Kit	CP9261HDMI/ADC

## HDMI Receivers

Target Applications: AVR, HTiB

Features	SiI9233A	SiI9135A
HDMI® Inputs	4	2
RGB Output, YCbCr Output	•	•
Display Interface	36-bit	36-bit
Max HDMI Resolution	1080p/60Hz, 36 bit (12 bit/color)	1080p/60Hz, 36 bit (12 bit/color)
3D Support	•	
RGB, YCbCr Color Space Conversion	•	•
HDCP Decryption, HDCP BIST and Pre-programmed HDCP Keys	•	•
Integrated NVRAM EDID	4	External
Advanced Sleep Modes	•	
Dolby® TrueHD, DTS-HD, SACD and DVD-audio	•	•
4x I²S and SACD DSD Outputs	•	•
DVD-Audio	2/6/8 ch, 32-192kHz	2/6/8 ch, 32-192kHz
Dolby Digital, DTS digital audio	32-96kHz	32-96kHz
Slave I²C Interface	•	•
Auto Video/Audio Mode Detection	•	•
Package Size	144-pin TQFP	144-pin TQFP
Starter Kit	CP9233HDMI	CP9135A

## HDMI Transmitters

Target Applications: Blu-ray Disc™, AVR, STB, HTiB

Features	SiI9334	SiI9136-A	SiI9136
RGB Input, YCbCr Input	Up to 48-bit	Up to 48-bit	Up to 48-bit
HDMI Output	1	1	1
Video Resolution	1080p/30Hz, 48 bit (16 bit/color)	4k30p, 1080p120	1080p/30Hz, 48 bit (16 bit/color)
3D Support	•	•	•
Audio Return Channel	•		
HDMI Ethernet Channel	•		
HDCP Encryption, HDCP BIST and Pre-programmed HDCP Keys	•	•	•
Advanced Sleep Modes	•	•	•
S/PDIF Compressed Audio	•	•	•
Dolby® TrueHD, DTS-HD, SACD and DVD-audio	•	•	•
8-ch I <sup>2</sup> S Interface @ 192 kHz	•	•	•
Master I <sup>2</sup> C Interface	•	•	•
DE Generator	•	•	•
Package Size	100-pin TQFP	100-pin TQFP	100-pin TQFP
Starter Kit	CP9334HDMI	CP9136HDMI-3	CP9334HDMI

## Video Processors

Target Applications: Blu-ray Disc™, AVR, STB, HTiB

Features	ABT1030	ABT1015
Input Formats	36-bit RGB/YCbCr	36-bit RGB/YCbCr
Output Formats	36-bit RGB/YCbCr	36-bit RGB/YCbCr
480i to 1080p Inputs and Outputs	•	•
Pass-through (Including 3D)	•	•
Precision Video Scaling™	•	•
Precision Deinterlacing™	SD	
Progressive Re-Processing (PREP™)	•	
Mosquito Noise Reduction		
Detail/Edge Enhancement		
Deep Color	•	•
x.v.Color Support	•	•
Standard Picture Controls	•	•
Frame Rate Conversion		
On Screen Display		
A/V Lipsync		
Host Interface	I <sup>2</sup> C	I <sup>2</sup> C
External Memory	1 SDRAM	
Package Size	176-LQFP	128-LQFP
Starter Kit	CP1030	CP1015

## MHL/HDMI-to-HDMI Bridge

*Target Applications: PC monitors and projectors*

Features	SiI1292
HDMI®/MHL™ Input (Auto detect)	1
HDMI® Output	1
HDCP	•
Video Resolution	HDMI mode: Up to 1080p/60 Hz MHL mode: Up to 1080p/30 Hz
Package Size	40-pin QFN
Starter Kit	CP1292

## HDMI/DVI Transmitters

*Target Applications: PC motherboards, desktops, notebooks, netbooks, and add-in cards (ADD2)*

Features	SiI1392	SiI1364A	SiI1362A	SiI1162	SiI164
HDMI Output	1				
Output Port	HDMI, DVI	1 DVI Port	1 DVI Port	1 DVI Port	1 DVI Port
HDCP	•				
Graphics Controller Interface	SVDO	SVDO	SVDO	12bit (3.3V/1.2V)	12bit-24bit (3.3V/1.2V)
Cable Support	>10 meters	>10 meters	>10 meters		
Microcontroller NOT Required	•	•	•	•	•
HDMI HD Audio / SPDIF	Auto Sense 3.3V-5V				
Video Resolution	Up to UXGA, 1080p/60 Hz	Up to UXGA	Up to UXGA	Up to UXGA	Up to UXGA
Package Size	64-pin QFN	64-pin TQFP/QFN	48-pin LQFP	48-pin TSSOP	64-pin TQFP
Starter Kit	CP1392ADD2	CP1364A	CP1364A	CP1162ADD	N/A

## DVI Receivers

*Target Applications: LCD monitors/panels, projectors and plasma displays*

Features	SiI1161
DVI Input	3.3V
Cable Support	>10 meters
Automatic Power Down	•
Graphics Controller Interface	24bit or 48bit
Video Resolution	Up to UXGA, 1080p/60 Hz
Package Size	100-pin TQFP
Starter Kit	CP1161DVI

## Storage Processors

Target Applications: PC motherboards, desktops, notebooks, external enclosures, DAS or NAS boxes, DVRs, and CE equipment

Features	SiI5923	SiI5744	SiI5734	SiI5723	SiI4726
3Gb/s Host and Device Ports	1 host, 2 device	1 host, 2 device	1 host, 2 device	1 host, 2 device	1 host, 5 device
Hardware RAID Modes	0, 1, JBOD	0, 1, JBOD	JBOD	0, 1, JBOD	0, 1, 10, JBOD
BIG or Concatenation Mode		•	•	•	•
USB 2.0 Host Interface		•	•		
SAFE33 and SAFE50 Modes		•			
Multi-RAID Modes		•	•	•	•
GUI Mgmt Applet	•	•	•	•	•
eSATA Support or "Gen2m"	•	•	•	•	•
Status Hardware LED Support	•	•	•	•	•
Hot Plug Support	•	•	•	•	•
Cable Support Up to 2 Meters	•	•	•	•	•
Package Size	40-pin QFN	88-pin QFN	88-pin QFN	88-pin QFN	364-ball HSBGA
Starter Kit	CP5923	PB574402-000	PB573402-000	PB572302-000	PB4726LPSATA300

## Host Controllers

Target Applications: PC motherboards, desktop, notebook, server, DVR, video surveillance, CE equipment, HBAs

Features	SiI3531A	SiI3512E	SiI3132	SiI3124A	SiI3114
Device Ports	1	2	2	4	4
SATA Device	3.0Gb/s or Gen2m	1.5Gb/s or Gen1i	3.0Gb/s or Gen2m	3.0Gb/s or Gen2m	1.5Gb/s or Gen1i
Host PCI Bus	x1 PCIe 1.0 / 2.5G	PCI 32bit 33/66MHz	x1 PCIe 1.0 / 2.5G	PCI/X 64bit 33/66MHz	PCI 32bit 33/66MHz
Software RAID Driver	(w/PM 0,1,10, 5)	0, 1	0, 1 ( w/PM 10, 5)	0, 1, 10, 5	0, 1, 10, 5
FIS Based Switching	•		•	•	
NCQ	•		•	•	
Vista, Windows 7, 2003, XP, 2K, NT, ME, 98 Support	•	•	•	•	•
MAC OS X			•	•	
Linux Support	•	•	•	•	•
Package Size	48-pin QFN	128-pin TQFP	88-pin QFN	364-ball HSBGA	176-pin TQFP
Starter Kit	PB3531-1ESATA300	PB3512SATA150	PB3132SATA300	PB3124SATA300	PB3114SATA150



## Port Multipliers

*Target Applications: Server motherboards, PC motherboards, CE motherboards, DVR motherboards, External Enclosures*

Features	SiI3826	SiI3726	SiI3723
Host Ports	1 SATA 3Gb/s	1 SATA 3Gb/s	1 SATA 3Gb/s
Device Ports	5 SATA 3Gb/s	5 SATA 3Gb/s	2 SATA 3Gb/s
SEMB Support	•	•	
ESATA Support	•	•	•
Software RAID Compatible	•	•	•
Hot Plug Support	•	•	•
Hardware LED Support	•	•	•
Package Size	208-pin LQFP	364-ball HSBGA	40-pin QFN
Starter Kit	PB3826	PB3726SATA300	CP3723

## MHL Transmitters

**Target Applications:** Mobile phones, tablets, cameras, camcorders and portable media players

Features	SiI9244	SiI9236	SiI9232	SiI8336	SiI8334	SiI8332
HDMI® Input	1				1	
Parallel Digital Video Input		1	1			
MIPI DSI Input				1		1
MHL™ Output	1	1	1	1	1	1
Max Video Resolution	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)	1080p/30Hz, 24 bit (8 bit/color)
Low Power for Maximum Mobile Battery Life	•	•	•	•	•	•
HDCP Encryption, Pre-programmed HDCP Keys			•			•
Advanced Sleep Modes	•	•	•	•	•	•
Dolby® Digital, DTS Digital Audio		•	•	•		•
8-ch I²S Interface @ 192 kHz		•	•	•		•
DE Generator		•	•	•		•
I²C Interface for Configuration	•	•	•	•	•	•
Package	49-ball BGA	64-ball BGA	64-ball BGA	49-ball BGA	49-ball BGA	49-ball BGA
Starter Kit	CP9244	CP9236	CP9232	CP8336	CP8334	CP8332

## MHL-to-HDMI Bridge

**Target Applications:** Docking stations, converters and adapters

Features	SiI9292
MHL Input	1
HDMI Output	1
Max Video Resolution	1080p/30Hz, 24 bit (8 bit/color)
Low Power for Maximum Mobile Battery Life	•
Package	40-pin QFN
Starter Kit	CP9292

## HDMI Transmitters

**Target Applications:** Mobile phones, tablets, cameras, camcorders and portable media players

Features	SiI9024ARBT	SiI9024AYBT	SiI9024ACNU	SiI9022ARBT	SiI9022AYBT	SiI9022ACNU
RGB Input, YCbCr Input	Up to 24-bit	Up to 24-bit	Up to 24-bit	Up to 24-bit	Up to 24-bit	Up to 24-bit
HDMI® Output	1	1	1	1	1	1
Max Video Resolution	1080p/60Hz, 24 bit (8 bit/color)	1080p/60Hz, 24 bit (8 bit/color)	1080p/60Hz, 24 bit (8 bit/color)	1080p/60Hz, 24 bit (8 bit/color)	1080p/60Hz, 24 bit (8 bit/color)	1080p/60Hz, 24 bit (8 bit/color)
Low Power for Maximum Mobile Battery Life	•	•	•	•	•	•
3D Support	•	•	•	•	•	•
HDCP Encryption, Pre-programmed HDCP Keys	•	•	•			
CEC Support	•	•	•	•	•	•
Advanced Sleep Modes	•	•	•	•	•	•
S/PDIF Compressed Audio	•	•	•	•	•	•
Dolby® Digital, DTS Digital Audio	32-96kHz	32-96kHz	32-96kHz	32-96kHz	32-96kHz	32-96kHz
8-ch I <sup>2</sup> S Interface @ 192 kHz	•	•	•	•	•	•
I <sup>2</sup> C Interface for Configuration	•	•	•	•	•	•
DE Generator	•	•	•	•	•	•
Package	81-ball BGA	49-ball BGA	72-pin QFN	81-ball BGA	49-ball BGA	72-pin QFN
Starter Kit	CP9024ARBT	CP9024AYBT	CP9024ACNU	CP9022ARBT	CP9022AYBT	CP9022ACNU

## HRTX Chipsets

**Target Applications:** Notebook PC, Tablet, HTiB, AVR, Blu-ray Disc™, Wireless Adapters, STB

Features	SB9220/SB9210
WirelessHD® Standard	V1.0
HRP Channels 2, 3	•
MRP Channel Support	
LRP Channels	3
Max. Video Resolution	1080p/60 4:4:4 24-bit/pixel
3D Video Support	•
LR-Audio (HDMI-ARC)	•
32-192kHz LPCM Audio	•
HDMI® 1.4a Interface	•
30-bit LVCMOS Interface	•
Integrated EDID Support	
RF PA/Antennas	32
Power Rails	1.2V/2.5V
Integrated Buck Controller	
Size	17x17mm/17x21mm
Package	BGA/Ceramic BGA
Starter Kit	Contact Sales

## HRRX Chipsets

**Target Applications:** Plasma HDTV Display, LCD Display, Front Projector, Wireless Adapters

Features	SB9221/SB9211
WirelessHD® Standard	V1.0
HRP Channels 2, 3	•
MRP Channel Support	
LRP Channels	3
Max. Video Resolution	1080p/60 4:4:4 24-bit/pixel
3D Video Support	•
LR-Audio (HDMI-ARC)	•
32-192kHz LPCM Audio	•
HDMI® 1.4a Interface	•
30-bit LVCMOS Interface	•
Integrated EDID Support	
RF PA/Antennas	32
Power Rails	1.2V/2.5V
Integrated Buck Controller	
Size	17x17mm/17x21mm
Package	BGA/Ceramic BGA
Starter Kit	Contact Sales



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