

DTV and Projector Products



Delivering flexibility, precision rendering, performance and security of digital content.

PORT PROCESSORS	Target Applications	Input/Output	Input Resolution	HDCP	TMDS	EDID	CEC	Package Size	Starter Kit
SiI9181A	Front panel of DTVs, A/V receivers, projectors and multifunctional monitors	1/1	VGA-UXGA, 480i/p, 576 i/p, 720p, 1080i/p	None	Adaptive equalizer and DPLL for signal recovery. TMDS signal converted to high-speed serial signal using TMDS transmitter driver. 225MHz	256 byte embedded EDID RAM	CEC compatible electrical I/O and CEC controller with CEC API	56-pin QFN	CP9181AHDMI
SiI9185A	DTVs, A/V receivers, projectors and multifunctional monitors	3/1	VGA-UXGA, 480i/p, 576 i/p, 720p, 1080i/p	None	Adaptive equalizer and DPLL for signal recovery. TMDS signal converted to high-speed serial signal using TMDS transmitter driver. 225MHz	256 byte embedded EDID RAM	CEC compatible electrical I/O and CEC controller with CEC API	80-pin QFP	CP9185AHDMI
SiI9285	LCD HDTVs, plasma HDTVs and projection HDTVs	4/1 with MHL™ Technology	1080p@60Hz or 1080i@120Hz with 36-bit color depth for HDMI, or 1080p@30Hz or 720p/1080i@60Hz with 24-bit color depth for MHL	HDCP 1.1 Support	Adaptive equalizer and DPLL for signal recovery. TMDS signal converted to high-speed serial signal using TMDS transmitter driver. 225MHz	Integrated NVRAM EDID for HDMI and optional VGA port	Integrated CEC	72-pin QFN	CP9285HDMI
SiI9287	LCD HDTVs, plasma HDTVs and projection HDTVs	4/1 with MHL Technology and InstaPort™ Technology	1080p@60Hz or 1080i@120Hz with 36-bit color depth for HDMI, or 1080p@30Hz or 720p/1080i@60Hz with 24-bit color depth for MHL	HDCP 1.1 Support	Adaptive equalizer and DPLL for signal recovery. TMDS signal converted to high-speed serial signal using TMDS transmitter driver. 225MHz	Integrated NVRAM EDID for HDMI and optional VGA port	Integrated CEC	72-pin QFN	CP9287HDMI

INPUT PROCESSORS	Target Applications	HDMI/MHL Inputs	Resolution Support	Output Interface	Analog Video Inputs	Digital Audio Output	HDCP Features	Other Features	Package Size	Starter Kit
SiI9251	LCD HDTVs, plasma HDTVs and projection HDTVs	4 HDMI ports with MHL and InstaPort	1080p@60Hz or 720p/1080i@120Hz with 36-bit color depth for HDMI or 1080p@30Hz or 720p/1080i@60Hz with 24-bit color depth with MHL	24/30/36-bit RGB/YCbCr 4:4:4, 8/10/12/16/20/24-bit YCbCr	4x12-bit ADC@170 MSPS conversion rate, 1.4 Vp-p analog input range, RGB/YPbPr video up to 1080p, and UXGA RGB support	S/PDIF and I²C output, I²S output, 2-channel PCM	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys	• InstaPort fast port switching technology • x.v.Color support • CEC • Integrated 4 EDIDs for HDMI • Low active/standby power	208-pin LQFP	CP9251HDMI/ADC

HDMI RECEIVERS	Target Applications	HDMI Ports	Bandwidth (MHz)	Resolution Support	Output Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
SiI9013	LCD HDTVs, plasma HDTVs, projectors	1	165	VGA-UXGA, 480i/p, 576 i/p, 720p, 1080i/p	12/24/48-bit RGB, 8/12/16/24/48-bit YCbCr	• 4xI²S outputs • DVD-audio (2/6/8 ch, 32-192 kHz) • S/PDIF input for PCM, Dolby® Digital, DTS Digital (32-96kHz)	• HDCP decryption • HDCP repeater • Integrated keys	• 3.3V interface • Slave I²C interface • Auto video/audio mode detection	128-pin LQFP (0.4mm pin pitch)	CP9013HDMI
SiI9025	LCD HDTVs, plasma HDTVs, front and rear projection HDTVs	2	165	VGA-UXGA, 480i/p, 576i/p, 720p, 1080i/p	24-bit RGB/YCbCr 4:4:4, 8/10/12/16/20/24-bit YCbCr 4:2:2	• S/PDIF and I²S output • 2-channel 32-192 kHz • 2-channel PCM • Dolby Digital • DTS	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys	• 3.3V interface • Slave I²C interface • Auto video/audio mode detection	144-pin TQFP	CP9025HDMI
SiI9125	LCD HDTVs, plasma HDTVs, front and rear projection HDTVs	2	225	Up to 1080p@60Hz or 720p/1080i@120Hz with 36-bit color depth	24/30/36-bit RGB/YCbCr 4:4:4, 8/10/12/16/20/24-bit YCbCr, 12/15/18-bit DMO (Digital Multimedia Output), RGB Color Space Converter	• S/PDIF and I²S output • 2-channel 32-192 kHz • 2-channel PCM • Dolby Digital • DTS	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys	Dual integrated HDMI 1.3 cores	144-pin TQFP (0.5mm pin pitch)	CP9125HDMI
SiI9127	LCD HDTVs, plasma HDTVs, front and rear projection HDTVs	2	225	1080p@60Hz or 720p/1080i@120Hz with 36-bit color depth	24/30/36-bit RGB/YCbCr 4:4:4, 16/20/24-bit YCbCr 4:2:2, 8/10/12-bit YCbCr 4:2:2, RGB Color Space Converter	• I²S output • S/PDIF output for PCM • Dolby Digital, DTS Digital (32-192 kHz) • 2:1 and 4:1 down-sampling for 96 kHz and 192 kHz streams	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys	• CEC • 2 EDIDs • Low standby power	128-pin TQFP	CP9127HDMI
SiI9223A	DLP TVs, HDTVs— projection and CRT, LCD HDTVs, plasma HDTVs/displays	4	225	1080p@60Hz or 720p/1080i@120Hz with 36-bit color depth	24/30/36-bit RGB/YCbCr 4:4:4, 16/20/24-bit YCbCr 4:2:2, 8/10/12-bit YCbCr 4:2:2, RGB Color Space Converter	• I²S output • S/PDIF output for PCM • Dolby Digital, DTS Digital (32-192 kHz) • 2:1 and 4:1 down-sampling to handle 96 kHz and 192 kHz streams	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys	• MHL technology support • CEC • 4 EDIDs • Low standby power	144-pin TQFP	CP9223HDMI

ITMDS TRANSMITTERS	Target Applications	Bandwidth (MHz)	Resolution Support	Graphics Controller Interface	Input Clocking Options	Receiver Sensing	Other Features	Package Size	Starter Kit
SiI7172	Internal single/dual link display interface for LCD, PDP, micro display RPTV. Embedded/specialty applications	225	VGA-UXGA, VGA-QUXGA (Dual)	Two pixel wide input for 24/30/36-bit data; one pixel wide input for 24/30/36/48-bit data	Single clock/ single edge	Yes	• Dual link HDCP DVI/ITMDS compliant • Dual link Tx complement to SiI7189 Rx • Spread spectrum support	128-pin LQFP	CP7181-7172, CP7189-7172

ITMDS RECEIVERS	Target Applications	Bandwidth (MHz)	Resolution Support	Display Interface	Automatic Power Down	24-bit True Color Support in All Modes	Other Features	Package Size	Starter Kit
SiI7161	LCD monitors, video and multimedia projectors, plasma displays	165 (single link)	VGA-UXGA (single link)	24-bit (1 pixel) or 48-bit (2 pixels)	Yes	Yes	• 3.3V interface • I²C interface • Programmable equalization for long cable support • Pin compatible with SiI1161	100-pin TQFP	CP7161-7160
SiI7169	LCD monitors, video and multimedia projectors, plasma displays	165 (single link)	VGA-UXGA (single link)	24-bit (1 pixel) or 48-bit (2 pixels)	Yes	Yes	• 3.3V interface • HDCP • I²C interface • Programmable equalization for long cable support • Pin compatible with SiI1161	100-pin TQFP	CP7169-7170
SiI7171	LCD, PDP, micro display RPTV. Embedded/specialty applications	225	VGA-UXGA	48-bit (1 pixel) or 72-bit (2 pixels)	Yes	Yes	• 3.3V interface • DVI compliant and ITMDS • Deep Color support • Auto equalization • 5V tolerant DDC I/O pads	128-pin LQFP	CP7171-7170, CP7171LCD
SiI7181	LCD, PDP, micro display RPTV. Embedded/specialty applications and DVI compatible monitors	450 (2x 225MHz)	VGA-QUXGA	48-bit (1 pixel) or 72-bit (2 pixels)	Yes	Yes	• 3.3V interface • Deep Color support • Single chip, dual link ITMDS/DVI solution • Replaces two SiI1169s in dual link DVI apps	208-pin QFP	CP7181-7172
SiI7189	LCD, PDP, micro display RPTV. Embedded/specialty applications and DVI compatible monitors	450 (2x 225MHz)	VGA-QUXGA	48-bit (1 pixel) or 72-bit (2 pixels)	Yes	Yes	• 3.3V interface • Deep Color support • Single chip dual link ITMDS/DVI solution with HDCP • Replaces two SiI1169s in dual link DVI apps	208-pin QFP	CP7189-7172

HDMI PHY	Description	Target Applications	HDMI Ports	Bandwidth (MHz)	Resolution Support	Output Interface	Audio Features	Other Features	Package Size	Starter Kit
SiI9003	Discrete HDMI receiver PHY	DTVs, plasma TVs, LCD TVs	1	165	VGA, SXGA, XGA, SXGA, UXGA, 480i/p, 576 i/p, 720p, 1080i/p	8-bit RGB, YCbCr 4:4:4 or 10/12-bit YCbCr 4:2:2	• Internal PLL clock source • Sample rates 32-192kHz	Works only with HDMI receiver IP digital logic integrated into partner SoC solutions licensed by Silicon Image, Inc.	88-pin QFN with e-pad	Ref. boards with partner SoC and SiI9003

Blu-ray, DVD, AVR, and STB Products



Enabling the secure distribution of high-performance digital video and audio in CE devices.

INPUT PROCESSORS	Target Applications	HDMI/MHL Inputs	Resolution Support	Output Interface	Analog Video Inputs	Digital Audio Output	HDCP Features	Other Features	Package Size	Starter Kit
SiI9261	Repeater systems: A/V receivers, switches, media boxes	4 HDMI ports with MHL™ and InstaPort™	1080p@60Hz or 720p/1080i@120Hz with 36-bit color depth for HDMI or 1080p@30Hz or 720p/1080i@60Hz with 24-bit color depth with MHL	24/30/36-bit RGB/YCbCr 4:4:4, 8/10/12/16/20/24-bit YCbCr	4x12-bit ADC@170 MSPS conversion rate, 1.4 Vp-p analog input range, RGB/YPbPr video up to 1080p, and UXGA RGB support	S/PDIF and I²C output, SACD and DVD Audio: 6-channel @ 32-192kHz, I²S output, compressed audio, 7.1 surround multi-channel, Dolby TrueHD, DTS HD	• HDCP decryption • HDCP BIST • Pre-programmed HDCP keys • HDCP repeater	• InstaPort fast port switching technology • x.v.Color support • CEC • Integrated 4 EDIDs for HDMI • Low active/standby power	208-pin LQFP	CP9261HDMI/ADC

HDMI TRANSMITTERS	Target Applications	HDMI Ports	Resolution Support	Input Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
SiI9034	Blu-ray players and recorders, DVD players and recorders, A/V receivers, digital set-top boxes, PVRs, D-VHS	1	VGA-SXGA, 480i/p, 576 i/p, 720p, 1080i/p	12/24-bit RGB/YCbCr 4:4:4, 8/10/12/16/20/24-bit YCbCr 4:2:2	• 4xI²S inputs • DVD-audio (2/6/8 ch, 32-192kHz) • S/PDIF input for PCM, Dolby® Digital DTS digital audio (32-96kHz sample rate) • 2/6/8-ch, 32-192kHz • S/PDIF compressed audio	• HDCP encryption • Integrated keys	• 165MHz bandwidth • Master I²C interface • 3.3V interface • DE generator	100-pin TQFP	CP9034HDMI
SiI9134	Blu-ray players and recorders, DVD players and recorders, A/V receivers, digital set-top boxes, PVRs, D-VHS	1	36-bit color depth and resolutions up to 1080p @ 60Hz or 720p/1080i @ 120Hz	12/24/30/36-bit RGB YCbCr 4:4:4, 16/20/24-bit YCbCr 4:2:2, 8/10/12-bit YCbCr 4:2:2	• Dolby® True HD, DTS-HD and DVD-audio through 4xI²S inputs • Dedicated 8-pin interface for DSD and SACD • 2-ch/8-ch, 192kHz • IEC60958 2-channel PCM or IEC61937 compressed audio (Dolby Digital, DTS, etc.) • S/PDIF compressed audio	• HDCP encryption • Integrated keys	• 225MHz bandwidth • Compatible with HDMI 1.3 specification • Master I²C interface • 3.3V interface • DE generator	100-pin TQFP	CP9134HDMI

HDMI RECEIVERS	Target Applications	HDMI Ports	Bandwidth (MHz)	Resolution Support	Output Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
SiI9135A	A/V receivers, set-top boxes, home theater in a box	2	225	VGA-UXGA, 480i/p, 576i/p, 720p, 1080i/p	36-bit RGB/YCbCr 4:4:4, 16/20/24-bit YCbCr 4:2:2, 12/15/18-bit, DMO (Digital Multimedia Output)	• DTS HD and Dolby TrueHD HDMI support up to 192kHz/24-bit • 4xI²S and SACD DSD outputs • DVD-Audio (2/6/8 ch, 32-192 kHz) • S/PDIF output for PCM Dolby Digital, DTS digital audio (32-96 kHz)	• HDCP decryption • HDCP BIST • HDCP repeater • Integrated keys	• 3.3V interface • Slave I²C interface • Auto video/audio mode detection	144-pin TQFP (0.5mm pin pitch)	CP9135A
SiI9233A	A/V receivers, set-top boxes, home theater in a box	4	225	VGA-UXGA, 480i/p, 576i/p, 720p, 1080i/p	36-bit RGB/YCbCr 4:4:4, 16/20/24-bit YCbCr 4:2:2, 12/15/18-bit, DMO (Digital Multimedia Output)	• DTS HD and Dolby TrueHD HDMI support up to 192kHz/24-bit • 4xI²S and SACD DSD outputs • DVD-audio (2/6/8 ch, 32-192 kHz) • S/PDIF output for PCM, Dolby Digital, DTS digital audio (32-96 kHz)	• HDCP decryption • HDCP BIST • HDCP repeater • Integrated keys	• 3.3V interface • Slave I²C interface • Auto video/audio mode detection • MHL support • Low standby power	144-pin TQFP (0.5mm pin pitch)	CP9233

HDMI PHY	Description	Target Applications	HDMI Ports	Bandwidth (MHz)	Resolution Support	Output Interface	Other Features	Package Size	Starter Kit
SiI9002	HDMI 1.2 transmitter PHY	DVD players, DVD recorders, set-top boxes, PVRs, HD-DVD players, camcorders	1	165	480p, 720p, 1080i, 1080p	12-bit interface to HDMI IP on Silicon Image, Inc. partner SoC solutions	Works only with HDMI transmitter IP digital logic integrated into partner SoC solutions licensed by Silicon Image, Inc.	48-pin TSSOP	Ref. boards with partner SoC and SiI9002

PC and Monitor Products

Enabling the secure distribution of high-performance digital video in PC and CE devices and peripherals.



HDMI TRANSMITTERS	Target Applications	HDMI Ports	Resolution Support	Input Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
Si11392	HDMI consumer interface for PC motherboards, desktop and notebook PCs, SDVO ADD2 cards	1	480i -1080p (DTV) and VGA-UXGA (PC)	SDVO graphics controller interface	HDMI HD audio (auto-sensed for 3.3V or 1.5V I/O) or S/PDIF audio	• HDCP encryption • Integrated keys	• 165MHz bandwidth • Serial input clocking • Receiver sensing • Microcontroller not required for operation • I²C interface • Cable support greater than 10 meters	64-pin QFN	CP1392ADD2

DVI TRANSMITTERS	Target Applications	Bandwidth (MHz)	Resolution Support	Graphics Controller Interface	Input Clocking Options	Receiver Sensing	Other Features	Package Size
Si1164	Desktop PCs (motherboards, add-in boards), notebook PCs	165	VGA-UXGA	12-bit or 24-bit	• Single clock/single edge • Single clock/dual edge • Dual clock/single edge	Yes	• I²C interface • 3.3V or 1.0-1.8V interface • De-skewing option	64-pin TQFP
Si1170B	Desktop PCs (motherboards, add-in boards), notebook PCs, Embedded designs	165	VGA-UXGA	12-bit or 24-bit	• Single clock/single edge • Single clock/dual edge • Dual clock/single edge	Yes	• DVI 1.0 • HDCP keys • I²C interface • 3.3V or 1.0-1.8V interface • De-skewing option • Low power standby mode • Enhanced jitter tolerance • Programmable DE generator	64-pin LQFP
Si11162	PC motherboards, graphics boards, notebook PCs	165	VGA-UXGA	12-bit	• Single clock/dual edge • Differential clock/single edge	Yes	• I²C interface • 3.0-3.6V or 1.0-1.9V interface • De-skewing option • BIOS and driver compatible with Si1164	48-pin TSSOP
Si11362A	PC motherboards, notebook PCs	165	VGA-UXGA	Serial Digital Video Output (SDVO)	Serial Only	Yes	• I²C interface • Supports Intel SDVO technology • Cable distance support greater than 10 meters	48-pin LQFP
Si11364A	Intel SDVO ADD2 cards	165	VGA-UXGA	SDVO	Serial Only	Yes	• HDMI output • I²C interface • Supports Intel SDVO technology • Cable distance support greater than 10 meters	64-pin TQFP and QFN

Storage Products

Scalable, reliable storage solutions for accessing high-quality digital media in PCs and DVRs and distributing throughout home, mobile and business environments.



STORAGE PROCESSORS	Description	Target Applications	Host	Max. Number of Devices	Additional Features	RAID Levels	Package Size	Starter Kit
Si14726	3Gbps eSATA host and five 3Gbps eSATA Gen2m device ports	Storage appliances, CE storage devices, and five-drive external storage enclosures	3 Gbps SATA	2	• eSATA signal support • Hot Plug support • Status LED support • Multi-RAID mode • GUI mgmt applet	FAST, SAFE (RAID 0, 1), BIG (concatenation) and JBOD	364-pin HSBGA	PB4726LPSATA300
Si15723	Low-cost, single chip processor with 3Gbps SATA host interface and two eSATA ports	DVRs, PC motherboards and consumer electronics devices	3 Gbps SATA	2	• eSATA capacity expansion • Drive locking • Backup button • Multi-RAID mode	FAST, SAFE (RAID 0, 1) SAFE53, SAFE50, BIG (concatenation), JBOD	88-pin, 10x10mm QFN	PB572302-000
Si15734	Storage processor with two 3Gbps eSATA device ports, one 3Gbps eSATA host port and one USB 2.0 host port	External storage enclosures and single-box backup storage devices	• 3 Gbps SATA • USB 2.0	2	• eSATA capacity expansion • Drive locking • Backup button • Multi-RAID mode	BIG (concatenation) and JBOD	88-pin, 10x10mm QFN	PB573402-000
Si15744	Storage processor with USB 2.0 or 3Gbps eSATA host and two 3Gbps eSATA Gen2m device ports	Storage appliances, CE storage devices, and dual-drive external storage enclosures	• 3 Gbps SATA • USB 2.0	2	• eSATA capacity expansion • Drive locking • Backup button • Multi-RAID mode	FAST, SAFE (RAID 0, 1) SAFE53, SAFE50, BIG (concatenation) and JBOD	88-pin, 10x10mm QFN	PB574402-000

PATA HOST CONTROLLERS	Description	Target Applications	PCI Bus	Max. Number of Devices	Max. Transfer Rates	Driver OS Support	Software RAID Levels	Package Size	Starter Kit
Si10680A	PCI to ATA133 host controller	PC motherboards, PC add-in cards, server motherboards, host bus adapters, RAID subsystems, embedded applications	32-bit, 33/66 MHz PCI	4	133 MB/s	Windows 2003, XP, 2K, NT, ME, 98, Linux	0, 1, 10	144-pin TQFP	PB0680A

BRIDGE/PORT MULTIPLIER	Description	Target Applications	Host	Max. Number of Devices	Driver OS Support	Additional Features	Package Size	Starter Kit
Si13726	SATA 1x5 Port multiplier	PC motherboards, PC add-in cards, server motherboards, host bus adapters, RAID	3 Gbps	5	Windows 2003, XP, 2K, Linux, Netware	SMB port and HotPlug	364-pin HSBGA	PB3726LPSATA300
Si13811A	Serial ATA to Parallel ATA	ATAPI devices, Blu-ray & HD DVD	1.5 Gbps	1	N/A		64-pin QFN	CP3811SATA150

SATA HOST CONTROLLERS	Description	Target Applications	PCI Bus	Max. Number of Devices	Max. Interface Rates	Driver OS Support	Software RAID Levels	Package Size	Starter Kit
Si13114	PCI to SATA host controller (4-port)	PC motherboards, PC add-in cards, server motherboards, host bus adapters, RAID subsystems, embedded applications	32-bit, 33/66 MHz PCI	4	3 Gbps	Windows 2003, XP, 2K, NT, ME, 98, Linux, Netware	0, 1, 10	176-pin 20x20mm TQFP	PB3114SATA150
Si13124A	PCI-X to SATA host controller (4-port)	Server motherboards, server add-in cards, host bus adapters, RAID subsystems, embedded applications	64-bit 133 MHz PCI-X	4	3 Gbps	Windows 2003, XP, 2K, Linux, Netware	0, 1, 10, 5	364-pin 21x21mm HSBGA	PB3124-2SATA300
Si13132	PCI Express to 3 Gb/s SATA host controller (2-Port)	PC motherboards, server motherboards, add-in cards, embedded systems	x1 PCI Express	2	3 Gbps	Windows 2003, XP, 2K, Linux	0, 1	88-pin 10x10mm QFN with e-pad	PB3132SATA300
Si13512E	PCI to SATA host controller (2-port)	PC motherboards, PC add-in cards, server motherboards, host bus adapters, RAID subsystems, embedded applications	32-bit, 33/66 MHz PCI	2	3 Gbps	Windows 2003, XP, 2K, NT, ME, 98, Linux, Netware	0, 1	128-pin 14x14mm TQFP with e-pad	PB3512SATA150
Si13531A	PCI Express to single-port Serial ATA (SATA) II host controller	PC motherboards, expresscard applications, server motherboards and embedded applications	1x 2.5 Gbps PCI Express	1	3 Gbps	Windows 2003, XP, 2K, NT, ME, 98, Linux, Netware	0, 1 (if PM on host), 10, 5	48-pin 7x7mm QFN with e-pad	PB3531-1ESATA300

Mobile Products

Connecting mobile devices to HDTVs and high-resolution monitors.



HDMI TRANSMITTERS	Target Applications	HDMI Ports	Resolution Support	Input Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
Si19022	Cameras, camcorders, portable media players, and mobile phones	1	VGA-UXGA, 480i/p, 576i/p, 720p, 1080i/p	12/24-bit RGB, 8/10/12/16/20/24-bit YCbCr	• 4xFS inputs • DVD-audio (2/6/8 ch, 32-192kHz) • S/PDIF input for PCM, Dolby Digital DTS digital audio (32-96kHz sample rate) • 2/6/8-ch, 32-192kHz • S/PDIF compressed audio	No HDCP	• 165MHz bandwidth • Ultra low power 55mW @ 720p, 80mW @ 1080p • Integrated CEC engine	84-ball TFBGA and 81-ball VFBGA	CP9022HDMI
Si19024	Portable media players and mobile phones	1	VGA-UXGA, 480i/p, 576i/p, 720p, 1080i/p	12/24-bit RGB, 8/10/12/16/20/24-bit YCbCr	• 4xFS inputs • DVD-audio (2/6/8 ch, 32-192kHz) • S/PDIF input for PCM, Dolby Digital DTS digital audio (32-96kHz sample rate) • 2/6/8-ch, 32-192kHz • S/PDIF compressed audio	• HDCP encryption • Integrated keys	• 165MHz bandwidth • Ultra low power 55mW @ 720p, 80mW @ 1080p • Integrated CEC • Integrated HDCP engine and key	84-ball TFBGA and 81-ball VFBGA	CP9024HDMI

MHL TRANSMITTERS	Target Applications	MHL Ports	Resolution Support	Input Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
Si19222 and Si19226	Cameras, camcorders, portable media players, and mobile phones	1	VGA to SXGA, 480i/p, 576i/p, 720p, 1080i	12/24-bit RGB, 8/10/12/16/20/24-bit YCbCr	• 2 FS channels • S/PDIF	• HDCP encryption • Integrated key • No HDCP on Si19226	• 225MHz MHL bandwidth • Single TMDS clock and data pair • Single wire control bus • Low active power (45mW @ 720p/1080i) and stand-by power (30uA)	64-ball VFBGA	CP9222-9290 and CP9222 CP9226-9290 and CP9226

MHL BRIDGE	Target Applications	HDMI Ports	Resolution Support	Input Interface	Audio Features	HDCP Features	Other Features	Package Size	Starter Kit
Si19290	MHL docking station, cradles, adapters	1	VGA to SXGA, 480i/p, 576 i/p, 720p, 1080i	MHL	L-PCM or compressed audio	None	• Low cost MHL to HDMI bridge • 225MHz MHL input • HDMI compliant output • Single TMDS clock & data pair • Single wire control bus (DDC and CEC commands)	48-pin LQFP	CP9222-9290 CP9226-9290

HDMI PHY	Description	Target Applications	HDMI Ports	Bandwidth (MHz)	Resolution Support	Output Interface	Audio Features	Other Features	Package Size	Starter Kit
Si19204	Dual-mode HDMI 1.3+ MHL transmitter PHY with integrated CEC	Blu-ray players, STBs, PVRs, high-end mobile devices	1	225	HDMI: up to 1080p/60, UXGA MHL: up to 1080i/60 and 1080p/30, SXGA	HDMI: 24/30/36-bit @ 1080p/60 MHL: 24-bit@1080i/60 and 1080p/30	Standard HDMI	• Supports Deep Color • Low power • Si19002 compatible • Provides reference clock for companion link layer IP core	40-pin QFN	
Si19206	Dual-mode HDMI 1.3+ MHL transmitter PHY with integrated CEC	DSC, camcorders, mobile phones, notebook PCs, PMPs, Personal Navigation	1	112	480i/p, 576i/p, 720p/60, 1080i/60, 1080p/24, 1080p/30, VGA, XGA, SXGA, UXGA/30 (HDMI only)	HDMI: 12-bit@720p/60, 1080i/60, 1080p/24, 1080p/30. MHL: 8-bit@720p/60, 1080i/60, 1080p/24, 1080p/30	Standard HDMI	Works only with companion link layer IP Core integrated into partner SoC (IP licensed by Silicon Image, Inc.)	28-pin VQFN	Evaluation Board



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