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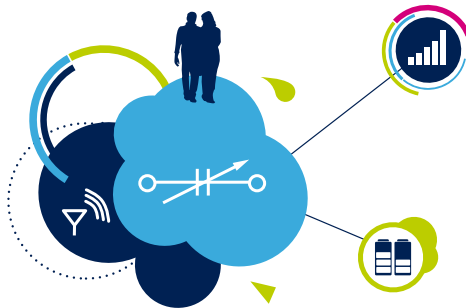
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# IPAD™, RF IPD and smart antenna tuning



EMI filtering, interface conditioning, and RF devices





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# IPD for RF front-end

## BALUNS

Part number	General description	Package	Insertion loss (I <sub>l</sub> )	At frequency range
			max (dB)	(GHz)
BAL-2690D3U	STMicroelectronics STLC2690	WLCSP 400μ	0.8	2.4 - 2.5
BALF-NRG-01D3	STMicroelectronics BLUENRG	WLCSP 400μ	1.1	2.4 - 2.5
BALF-SPI-01D3	STMicroelectronics SPIRIT1	WLCSP 400μ	1.4	0.868 - 0.915
BALF-SPI-02D3	STMicroelectronics SPIRIT1	WLCSP 400μ	2.3	0.433
BAL-CC25-01D3	Texas Instrument CC253x, CC254x, CC257x, CC852x, CC853x	WLCSP 400μ	0.73	2.4 - 2.5
BALF-CC25-02D3	Texas Instrument CC2541	WLCSP 400μ	1.6	2.4 - 2.5
BALF-CC26-05D3	Texas Instrument CC2630/2650 (5x5 package)	WLCSP 400μ	1.35	2.4 - 2.5
BALF-CC26-07D3	Texas Instrument CC2630/2650 (7x7 package)	WLCSP 400μ	1.35	2.4 - 2.5
BAL-CC1101-01D3	Texas Instrument CC1101	WLCSP 400μ	1.7	0.868 - 0.915
BALF-112X-01D3	Texas Instrument CC1120, CC1125, CC1175, CC1200	WLCSP 400μ	2.1	0.868 - 0.915
BALF-112X-02D3	Texas Instrument CC1120, CC1125, CC1175, CC1200	WLCSP 400μ	1.3	0.433
BAL-WINC1500A-D3	Atmel ATWINC1500A	WLCSP 400μ	0.7	2.4 - 2.5
BAL-NRF01D3	Nordic Semi nRF24LE1, nRF51822-QFAACx, nRF51822-QFABAx, nRF51422-QFAACx	WLCSP 400μ	1.3	2.4 - 2.5
BALF-NRF01D3	Nordic Semi nRF51822-QFAAGx, nRF51822-QFABBx, nRF51422-QFAAEx, nRF51422-QFABAx	WLCSP 400μ	1.35	2.4 - 2.5
BALF-NRF01E3	Nordic Semi nRF51822-QFAAHx, nRF51822-QFACAx, nRF51422-QFAAF0, nRF51422-QFACA0	LGA package	2.2	2.4 - 2.5
BAL-NRF02D3	Nordic Semi nRF51822-CxAx, nRF51422-CxAx	WLCSP 400μ	1.9	2.4 - 2.5

## COUPLERS

Part number	General description	Package	Insertion loss ( $I_{\text{I}}$ )	At frequency range
			max (dB)	(GHz)
<b>CPL-WB-00D3</b>	Wide band directional coupler with ISO port	WLCSP 400 $\mu$	0.2	0.8 - 2.2
<b>CPL-WB-01D3</b>	Wide-band directional coupler with ISO port	WLCSP 400 $\mu$	0.2	0.8 - 2.2
<b>CPL-WB-02D3</b>	Wide-band, directional coupler with integrated 50 ohm loaded isolated port	WLCSP 400 $\mu$	0.2	2.4 - 5.9
<b>CPL-WBF-00D3</b>	Wide-band directional coupler with ISO port	WLCSP 400u	0.15 - 0.30	0.7 - 2.7
<b>DCPL-WB-00D3</b>	Wide band dual path directional coupler with ISO port	WLCSP 400 $\mu$	0.2	0.8 - 2.0
<b>DCPL-WB-02D3</b>	Wide-band, dual-path directional coupler with integrated 50 ohm loaded isolated port	WLCSP 400 $\mu$	0.2	2.4 - 2.5; 4.9 - 5.9

## DIPLEXERS

Part number	General description	Package	Insertion loss ( $I_{\text{I}}$ )	At frequency range
			max (dB)	(GHz)
<b>DIP1524-01D3</b>	GPS/GLONASS and 2.4 GHz diplexer	WLCSP 400 $\mu$	0.65	1.5 - 1.6; 2.4 - 2.7
<b>DIP2450-01D3</b>	2 G / 5 G WLAN diplexer	WLCSP 400 $\mu$	0.70	2.4 - 2.5; 4.9 - 5.9

## FILTERS

Part number	General description	Package	Insertion loss ( $I_{\text{I}}$ )	At frequency range
			max (dB)	(GHz)
<b>DLPF-GP-01D3</b>	GreenPeak GP540/560 - Dual differential Low pass filter	WLCSP 400 $\mu$	1.45	2.4 - 2.5
<b>BBPF-SXM-01M8Y</b>	Sirius XM radio - Band pass filter	WLCSP 400 $\mu$	2.70	2.4 - 2.5



# Antenna tuners

## RF TUNABLE CAPACITORS

Part number	General description	Package	Pitch	Number of tunable capacitors	Capacitor control	Capacitance (@ 2 V)	Capacitance (@ Vmax)	Tuning ratio (Delta C) (2 V-20 V)	Input leakage current ( $I_{in}$ ) (@ 20 V)	Quality factor (Q) (@ 1 GHz)	IP3 linearity (IP3) (@ 2 V)
			typ (mm)			typ (pF)	typ (pF)	typ	max (nA)	typ	typ (dBm)
STPTIC	BST tunable high-Q RF capacitor	Flip-chip; $\mu$ QFN-6L	0.5	1	Analog	2.7 to 8.2	0.8 to 2.3	3.5	100	65	60
STPTIC-27L1M6	BST tunable high-Q RF capacitor	$\mu$ QFN-6L	0.5	1	Analog	2.7	0.77	4	100	65	70
STPTIC-15G2	BST tunable high-Q RF capacitor 1.5 pF	Flip-chip	0.4	1	Analog	1.5	0.32	5	100	65	60
STPTIC-27G2	BST tunable high-Q RF capacitor 2.7 pF	Flip-chip	0.4	1	Analog	2.7	0.57	5	100	65	60
STPTIC-33G2	BST tunable high-Q RF capacitor 3.3 pF	Flip-chip	0.4	1	Analog	3.3	0.69	5	100	65	60
STPTIC-39G2	BST tunable high-Q RF capacitor 3.9 pF	Flip-chip	0.4	1	Analog	3.9	0.78	5	100	65	60
STPTIC-47G2	BST tunable high-Q RF capacitor 4.7 pF	Flip-chip	0.4	1	Analog	4.7	0.94	5	100	65	60
STPTIC-56G2	BST tunable high-Q RF capacitor 5.6 pF	Flip-chip	0.4	1	Analog	5.6	1.12	5	100	65	60
STPTIC-68G2	BST tunable high-Q RF capacitor 6.8 pF	Flip-chip	0.4	1	Analog	6.8	1.35	5	100	65	60
STPTIC-82G2	BST tunable high-Q RF capacitor 8.2 pF	Flip-chip	0.4	1	Analog	8.2	1.66	5	100	65	60

## RFFE AND SPI CONTROL ICs

Part number	General description	Package	Number of outputs	Regulated output voltage	Digital input type	Input voltage ( $V_{in}$ )	Supply voltage ( $V_{DD}$ )	Current consumption (active)	Current consumption (shutdown)	DAC voltage resolution	Dynamic control (Turbo, Glide)
				max (V)		min (V)	min (V)	typ ( $\mu$ A)	typ ( $\mu$ A)	min (mV)	
STHVDAC-303	High-voltage BST capacitance controller	Flip-chip 500 $\mu$	3	30	SPI	2.3	1.7	700	5	117	no
STHVDAC-304M	High-voltage BST capacitance controller	Flip-chip 400 $\mu$	4	30	MIPI	2.3	1.7	700	5	117	no
STHVDAC-253M	Antenna Tuning Circuit	Flip-chip 400 $\mu$	3	25	MIPI	2.3	1.7	700	5	117	no
STHVDAC-253MTG	Antenna Tuning Circuit	Flip-chip 400 $\mu$	3	25	MIPI	2.3	1.7	700	5	117	yes
STHVDAC-256MTG	Antenna Tuning Circuit	Flip-chip 400 $\mu$	6	25	MIPI	2.3	1.7	700	5	117	yes

# Integrated EMI filtering and ESD protection

## AUDIO AND VIDEO IPAD™: EMI FILTER AND ESD PROTECTION

Part number	Application	Number of lines	Package	Pin count	Attenuation @ 900 MHz	Bandwidth (@ -3 dB)	Filter resistance (FR)
					(dB)	(MHz)	typ ( $\Omega$ )
EMIF02-010ABRY	Video BroadR Reach™ AEC-Q101 compliant	2	Wettable flanks QFN 3.0 x 3.0	5	-20 dB from 60 MHz	250	-
EMIF08-VID1F3	Video	8	WLCSP 400 $\mu$	20	-43 dB	98	100
EMIF07-KB01F7	Video	7	WLCSP 350 $\mu$	20	-23 dB	320	330
EMIF02-AV01F3	Audio and Video	2	WLCSP 400 $\mu$	5	-35 dB	0.4	15
EMIF04-EAR02M8	Audio and Microphones	4	$\mu$ QFN-8L	8	-30 dB	70	0.3
EMIF05-AUD02F3	Audio and Microphones	2	WLCSP 400 $\mu$	12	-28 dB	1.2	2200
EMIF02-MIC03M6	Microphones	2	$\mu$ QFN-6L	6	-33 dB	100	68
EMIF02-MIC06F3	Microphones	2	WLCSP 400 $\mu$	8	-46 dB	2.0	2200
EMIF02-MIC02F2	Microphones	2	WLCSP 500 $\mu$	5	-30 dB	180	470
EMIF02-MIC02F3	Microphones	2	WLCSP 400 $\mu$	5	-30 dB	300	470
EMIF02-MIC03F2	Microphones	2	WLCSP 500 $\mu$	5	-40 dB	50	68
EMIF02-SPK02F2	Speaker	2	WLCSP 500 $\mu$	5	-40 dB	20	0.35
EMIF02-SPK03F2	Speaker	2	WLCSP 500 $\mu$	5	-40 dB	20	0.07

## DISPLAY, CAMERA AND KEYPAD IPAD™: COMMON MODE FILTER

### Serial interface camera and display IPAD

Part number	Application	ESD protection		Number of lines	Package	Pin count	Common mode attenuation (S <sub>21CP</sub> )			
		Datalines	Vbus				700 MHz	900 MHz	2.4 GHz	5.0 GHz
ECMF02-3HSM6	MIPI D-PHY	Yes	-	3	μQFN-6L	6	-22 dB	-33 dB		
ECMF04-4AMX12	MIPI D-PHY	Yes	-	4	μQFN-12L	12	-16 dB	-35 dB	-15 dB	-22 dB
ECMF04-4HSM10	MIPI D-PHY	Yes	-	4	μQFN-10L	10	-20 dB	-33 dB		
ECMF06-6AM16	MIPI D-PHY	Yes	-	6	μQFN-16L	16	-17 dB	-24 dB		
ECMF06-6HSM16	MIPI D-PHY	Yes	-	6	μQFN-16L	16	-20 dB	-33 dB		
CMF2-0650A09H3	MIPI D-PHY	-	-	2	CSP - 5 microbumps	5	-27 dB	-35 dB	-23 dB	-25 dB
CMF2-24A60H3	MIPI D-PHY	-	-	2	CSP - 4 microbumps	4		-15 dB	-40 dB	-16 dB
ECMF4-20A42N10	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	4	μQFN-10L	10	-13 dB	-16 dB	-25 dB	
ECMF04-4HSWM10	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	4	μQFN-10L	10		-15 dB	-28 dB	-16 dB
ECMF02-2HSMX6	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	2	μQFN-6L	6	-20 dB	-25 dB	-20 dB	-20 dB
ECMF02-2BF3	USB 2.0	Yes	-	2	WLCSP 400μ	5	-13 dB	-24 dB	-16 dB	
ECMF02-3BF3	USB 2.0	Yes	-	3	WLCSP 400μ	6		-29 dB		
ECMF02-4CMX8	USB 2.0	Yes	Yes	2	μQFN-8L	8	-13 dB	-27 dB	-13 dB	
ECMF2-0730V12M12	USB 2.0	Yes	Yes	2	μQFN -12L	12	-18 dB	-30 dB	-20 dB	-13 dB
ECMF02-2AMX6	USB 2.0 and MIPI D-PHY/MDDI	Yes	-	2	μQFN-6L	6	-16 dB	-34 dB	-15 dB	



## DISPLAY, CAMERA AND KEYPAD IPAD™: EMI FILTER AND ESD PROTECTION

### Parallel interface display and camera IPAD, keypad IPAD

Part number	General description	Number of lines	Package	Pin count	Bandwidth	Attenuation		Capacitance
					(MHz)	900 MHz	2.4 GHz	max (pF)
EMIF08-VID1F3	Video	8	WLCSP 400μ	20	98	-42 dB	-35 dB	7
EMIF06-VID01F2	Video	6	WLCSP 500μ	12	160	-40 dB	-25 dB	19
EMIF08-VID01F2	Video	8	WLCSP 500μ	19	160	-33 dB	-34 dB	19
EMIF07-KB01F7	Video	7	WLCSP 350μ	20	320	-23 dB	-27 dB	30
EMIF10-COM01F2	Display	10	WLCSP 500μ	23	120	-37 dB	-42 dB	50
EMIF10-LCD02F3	Display	10	WLCSP 400μ	25	200	-23 dB	-45 dB	30
EMIF07-LCD02F3	Display	7	WLCSP 400μ	19	200	-25 dB	-42 dB	30
EMIF08-LCD04M16	Display	8	μQFN-16L	16	400	-35 dB	-38 dB	19
EMIF10-1K010F2	Keypads	10	WLCSP 500μ	23	35	-25 dB	-18 dB	120
EMIF06-1005MX12Y	General purpose < 200 MHz AEC-Q101 compliant	12	μQFN-12L	12	150	-35 dB	-33 dB	52
EMIF04-1005M8	General purpose < 200 MHz	4	μQFN-8L	8	110	-35 dB	-32 dB	52
EMIF06-1005M12	General purpose < 200 MHz	6	μQFN-12L	12	110	-35 dB	-32 dB	52
EMIF06-1005N12	General purpose < 200 MHz	6	μQFN-12L	12	110	-35 dB	-32 dB	52
EMIF08-1005M16	General purpose < 200 MHz	8	μQFN-16L	16	110	-35 dB	-33 dB	52
EMIF08-1005T16	General purpose < 200 MHz	8	μQFN-16L	16	110	-35 dB	-33 dB	50
EMIF06-1502M12	General purpose < 300 MHz	6	μQFN-12L	12	210	-25 dB	-32 dB	16.5
EMIF04-1502M8	General purpose < 300 MHz	4	μQFN-8L	8	210	-25 dB	-32 dB	16.5
EMIF08-1502M16	General purpose < 300 MHz	8	μQFN-16L	16	210	-30 dB	-27 dB	16.5
EMIF05-SK01F3	General purpose < 400 MHz	5	WLCSP 400μ	11	300	-35 dB	-25 dB	1200
EMIF08-0402T16	General purpose < 400 MHz	8	μQFN-16L	16	350		-24 dB	20

## MEMORY AND SIM CARD IPAD™

Part number	Application	Number of lines	Package	Pin count	Specific application	Bandwidth (@ -3 dB)	Attenuation		Line capacitance (C)
						(MHz)	900 MHz	2.4 GHz	max (pF)
EMIF03-SIM02F2	SIM card	3	WLCSP 500μ	8	3 lines + Vcc	200	-22 dB	-20 dB	20
EMIF03-SIM02M8	SIM card	3	μQFN-8L	8	3 lines + Vcc	280	-18 dB	-24 dB	20
EMIF03-SIM03F3	SIM card	3	WLCSP 400μ	8	3 lines + Vcc	350	-15 dB	-32 dB	12
EMIF03-SIM04F3	SIM card	3	WLCSP 400μ	12	3 lines + ESD	400	-12 dB	-22 dB	12
EMIF03-SIM05F3	SIM card	4	WLCSP 400μ	8	3 lines + ESD + NFC	300	-14 dB	-23 dB	12
EMIF03-SIM06F3	SIM card	3	WLCSP 400μ	11	3 lines + ESD + pull-up	400	-14 dB	-22 dB	12
EMIF06-MSD02N16	mini- and micro-SD card	6	μQFN-16L	16	With pull-up resistor	350	-18 dB	-24 dB	20
EMIF06-MSD04F3	mini- and micro-SD card	6	WLCSP 400μ	12	With pull-up resistor	550	-9 dB	-17 dB	10
EMIF06-mSD01F2	mini- and micro-SD card	6	WLCSP 500μ	12	With pull-up resistor	300	-14 dB	-25 dB	20
EMIF09-SD01F3	mini- and micro-SD card	9	WLCSP 400μ	25	With pull-up resistor	300	-16 dB	-22 dB	20
EMIF06-HSD03F3	mini- and micro-SD card	6	WLCSP 400μ	17	Without pull-up resistor	3000	-0.3 dB	-2.7 dB	3
EMIF06-HSD04F3	mini- and micro-SD card	6	WLCSP 400μ	15	With pull-up resistor	2000	-0.3 dB	-3 dB	4.5
EMIF06-USD05F3	mini- and micro-SD card	6	WLCSP 400μ	15	Without pull-up resistor	300	-30 dB	-26 dB	14
EMIF06-USD04F3	mini- and micro-SD card	6	WLCSP 400μ	15	Without pull-up resistor	600	-5 dB	-22 dB	12
EMIF06-USD14F3	mini- and micro-SD card	6	WLCSP 400μ	15	With pull-up resistor	600	-8 dB	-17 dB	12
EMIF06-HMC02F2	high speed multimedia card	6	WLCSP 500μ	16	With pull-up resistor	400	-14 dB	-27 dB	20

## STANDARD MULTILINE BUS IPAD™ EMI FILTER AND ESD PROTECTION

Part number	Number of lines	Package	Pin count	Bandwidth (@ -3 dB)	Attenuation		Line capacitance (C <sub>line</sub> )
				(MHz)	900 MHz	2.4 GHz	max (pF)
EMIF01-1005W5	2	SOT323-5L	5	150	-24 dB	-12 dB	50
EMIF01-1003M3	1	SOT-883	3	180	-27 dB	-20 dB	39
EMIF02-1003M6	2	μQFN-6L	6	180	-27 dB	-17 dB	39
EMIF04-1005M8	4	μQFN-8L	8	110	-35 dB	-33 dB	52
EMIF04-1502M8	4	μQFN-8L	8	210	-27 dB	-31 dB	16.5
EMIF06-1002F2	6	WLCSP 500μ	12	280	-19 dB	-20 dB	13.8
EMIF06-1005M12	6	μQFN-12L	12	110	-35 dB	-32 dB	52
EMIF06-1502M12	6	μQFN-12L	12	210	-25 dB	-32 dB	16.5
EMIF08-1005M16	8	μQFN-16L	16	110	-35 dB	-33 dB	52
EMIF08-1502M16	8	μQFN-16L	16	210	-35 dB	-32 dB	16.5
EMIF08-1005T16	8	μQFN-16L	16	110	-35 dB	-34 dB	50

## USB IPAD™: SINGLE ENDED EMI FILTER OR COMMON MODE FILTER

Part number	Application	ESD protection		Number of lines	Packages	Pin count	S <sub>21cc</sub> or S <sub>21dd</sub>	Attenuation (S <sub>21cc</sub> or S <sub>21dd</sub> )			
		Datalines	Vbus					700 MHz	900 MHz	2.4 GHz	5.0 GHz
ECMF4-20A42N10	USB 3.1 Gen 1	Yes	-	4	μQFN-10L	10	S21cc	-13 dB	-16 dB	-25 dB	
ECMF04-4HSWM10	USB 3.1 Gen 1	Yes	-	4	μQFN-10L	10	S21cc		-15 dB	-28 dB	-16 dB
ECMF02-2HSMX6	USB 3.1 Gen 1	Yes	-	2	μQFN-6L	6	S21cc	-20 dB	-25 dB	-20 dB	-20 dB
ECMF02-2BF3	USB 2.0	Yes	-	2	WLCSP 400μ	5	S21cc	-13 dB	-24 dB	-16 dB	
ECMF02-3BF3	USB 2.0	Yes	-	3	WLCSP 400μ	6	S21cc		-29 dB		
ECMF02-4CMX8	USB 2.0	Yes	Yes	2	μQFN-8L	8	S21cc	-13 dB	-27 dB	-13 dB	
ECMF2-0730V12M12	USB 2.0	Yes	Yes	2	μQFN -12L	12	S21cc	-18 dB	-30 dB	-20 dB	-13 dB
ECMF02-2AMX6	USB 2.0	Yes	-	2	μQFN-6L	6	S21cc	-16 dB	-34 dB	-15 dB	
EMIF02-USB01F2	USB 2.0 Low Speed	Yes	Yes	2	WLCSP 500μ	6	S21dd	-20 dB	-24 dB	-30 dB	
EMIF02-USB01F2	USB 2.0 Low Speed	Yes	Yes	2	WLCSP 500μ	6	S21dd	-20 dB	-24 dB	-30 dB	
EMIF02-USB03F2	USB 2.0 Low Speed	Yes	Yes	2	WLCSP 500μ	5	S21dd	-14 dB	-16 dB	-30 dB	-22 dB
USBDF01W5	USB 2.0 Low Speed	Yes	-	2	SOT323-5L	5	S21dd	-27 dB	-23 dB	-17 dB	
USBDF02W5	USB 2.0 Low Speed	Yes	-	2	SOT323-5L	5	S21dd	-27 dB	-23 dB	-17 dB	
USBUF01W6	USB 2.0 Low Speed	Yes	-	2	SOT323-6L	6	S21dd	-20 dB	-28 dB	-13 dB	
USBUF02W6	USB 2.0 Low Speed	Yes	-	2	SOT323-6L	6	S21dd	-20 dB	-28 dB	-13 dB	
USBUF01P6	USB 2.0 Low Speed	Yes	-	2	SOT-666	6	S21dd	-19 dB	-16 dB		

## ECMF™ AND CMF SERIES: COMMON MODE FILTER AND ESD PROTECTION

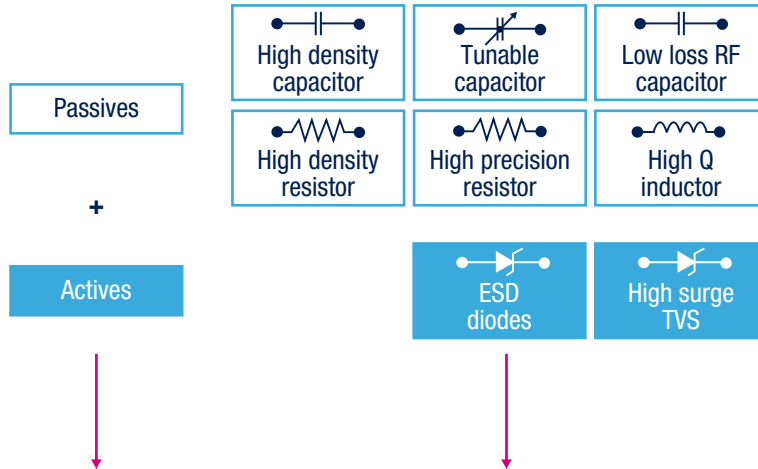
Part number	Application	ESD protection		Number of lines	Packages	Pin count	Common mode attenuation $S_{d1CC}$			
		Datalines	Vbus				700 MHz	900 MHz	2.4 GHz	5.0 GHz
ECMF02-3HSM6	MIPI D-PHY	Yes	-	3	μQFN-6L	6	-22 dB	-33 dB		
ECMF04-4AMX12	MIPI D-PHY	Yes	-	4	μQFN-12L	12	-16 dB	-35 dB	-15 dB	-22dB
ECMF04-4HSM10	MIPI D-PHY	Yes	-	4	μQFN-10L	10	-20 dB	-33 dB		
ECMF06-6AM16	MIPI D-PHY	Yes	-	6	μQFN-16L	16	-17 dB	-24 dB		
ECMF06-6HSM16	MIPI D-PHY	Yes	-	6	μQFN-16L	16	-20 dB	-33 dB		
CMF2-0650A09H3	MIPI D-PHY	-	-	2	CSP - 5 microbumps	5	-27 dB	-35 dB	-23 dB	-25 dB
CMF2-24A60H3	MIPI D-PHY	-	-	2	CSP - 4 microbumps	4		-15 dB	-40 dB	-16 dB
ECMF4-20A42N10	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	4	μQFN-10L	10	-13 dB	-16 dB	-25 dB	
ECMF04-4HSWM10	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	4	μQFN-10L	10		-15 dB	-28 dB	-16 dB
ECMF02-2HSMX6	USB 3.1 Gen 1 and HDMI 2.0	Yes	-	2	μQFN-6L	6	-20 dB	-25 dB	-20 dB	-20 dB
ECMF02-2BF3	USB 2.0	Yes	-	2	WLCSP 400μ	5	-13 dB	-24 dB	-16 dB	
ECMF02-3BF3	USB 2.0	Yes	-	3	WLCSP 400μ	6		-29 dB		
ECMF02-4CMX8	USB 2.0	Yes	Yes	2	μQFN-8L	8	-13 dB	-27 dB	-13 dB	
ECMF2-0730V12M12	USB 2.0	Yes	Yes	2	μQFN -12L	12	-18 dB	-30 dB	-20 dB	-13 dB
ECMF02-2AMX6	USB 2.0 and MIPI D-PHY/MDDI	Yes	-	2	μQFN-6L	6	-16 dB	-34 dB	-15 dB	

## HDMI SERIES

Part number	General description	HDMI standard	Interface type	Package size mm	Package	Pitch	TMDS line protection	Bandwidth	HDMI long cable drive	5 V backdrive	Enable
<b>HDMI2C1-5DIJ</b>	Signal conditioning and ESD protection for HDMI control line interfaces	HDMI 1.4 and 2.0	Source	5.0 x 4.0	DFN-16L	500µm	-	-	Yes	No	No
<b>HDMI2C1-6C1</b>	Signal conditioning and ESD protection for HDMI control line interfaces	HDMI 1.4 and 2.0	Source	3.5 x 3.5	QFN-18L	500µm	-	-	Yes	No	No
<b>HDMI2C1-14HD</b>	Signal conditioning and ESD protection for HDMI control and TMDS line interfaces	HDMI 1.4 and 2.0	Source	6.5 x 3.5	µQFN-36L	500µm	Yes	6.5 GHz	Yes	Yes	No
<b>HDMI2C2-14HD</b>	Signal conditioning and ESD protection for HDMI control and TMDS line interfaces	HDMI 1.4 and 2.0	Sink	6.5 x 3.5	µQFN-36L	500µm	Yes	6.5 GHz	Yes	No	No
<b>HDMI2C1-14HDS</b>	Signal conditioning and ESD protection for HDMI control and TMDS line interfaces	HDMI 1.4 and 2.0	Source	4.0 x 4.0	µQFN-36L	500µm	Yes	6.0 GHz	Yes	No	No
<b>HDMI2C2-5F2</b>	Signal conditioning and ESD protection for HDMI control line interfaces	HDMI 1.4 and 2.0	Source	2.0 x 1.35	WLCSP-12b	500µm	-	-	Yes	Yes	Yes
<b>HDMI2C3-5F2</b>	Signal conditioning and ESD protection for HDMI control line interfaces	HDMI 1.4 and 2.0	Source	2.1 x 1.5	WLCSP-12b	500µm	-	-	Yes	Yes	Yes
<b>HDMI2C4-5F2</b>	Signal conditioning and ESD protection for HDMI control line interfaces	HDMI 1.4 and 2.0	Sink	2.1 x 1.5	WLCSP-10b	500µm	-	-	Yes	Yes	Yes
<b>HDMI05-CL01F3</b>	ESD protection for HDMI control line with pull-up resistor on DDC bus and pull-down on HPD	HDMI 1.4 and 2.0	Source and Sink	1.1 x 1.1	WLCSP-8b	400µm	-	-	No	No	No
<b>HDMI05-CL02F3</b>	ESD protection for HDMI control line with pull-up resistor on DDC bus/CEC and pull-down on HPD	HDMI 1.4 and 2.0	Source and Sink	1.1 x 1.1	WLCSP-9b	400µm	-	-	No	No	No



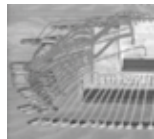
# ASIP (Application Specific Integrated Passives)



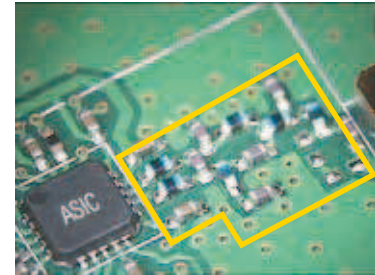
## ASIP (Application Specific Integrated Passives)



Chip scale package  
Plastic package



System in package





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