



ICs

Interface

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LVDS Interface ICs

A
Interface

27bit LVDS Transmitter 27:4 Serializer									
Part No.	Type	bits (bit)	Color Depth	Input Specification	Output Specification	Clock Frequency (MHz)	Supply Voltage (V)	Operating Temperature (°C)	Package
BU90T81	Serializer	27	8	LVC MOS	LVDS Single Link	20 to 112	1.65 to 1.95	-20 to +85	VBGA048W040
27bit LVDS Transmitter 27:8 Serializer									
BU90T82	Serializer	27	8	LVC MOS	LVDS Dual Link	10 to 174	1.62 to 1.98 1.62 to 3.6	-40 to +85	SBGA072T070A
35bit LVDS Transmitter 35:5 Serializer									
BU8254KVT	Serializer	35	10	LVC MOS	LVDS Single Link	8 to 112	3.0 to 3.6	-40 to +85	TQFP64V
BU8254GUW	Serializer	35	10	LVC MOS	LVDS Single Link	8 to 112	3.0 to 3.6	-20 to +85	VBGA099W060
56bit LVDS Transmitter 56:8 Serializer									
BU7988KVT	Serializer	56	8	LVC MOS	LVDS Dual Link	8 to 112	3.0 to 3.6	-20 to +85	TQFP100V
35bit LVDS Receiver 5:35 Deserializer									
BU90R104	Deserializer	35	10	LVDS Single Link	LVC MOS	8 to 112	2.3 to 3.6	-40 to +85	TQFP64V
56bit LVDS Receiver 8:56 Deserializer									
BU7985KVT	Deserializer	56	8	LVDS Dual Link	LVC MOS	20 to 112	3.0 to 3.6	-20 to +85	TQFP100V
67bit LVDS Receiver 10:67 Deserializer									
BU90R102	Deserializer	67	10	LVDS Dual Link	LVC MOS	8 to 160	2.3 to 3.6	-40 to +85	HQFP144VM
70bit LVDS Distributor									
BU90RT102	Serializer Deserializer	70	10	LVDS	LVDS	20 to 135	3.0 to 3.6	-20 to +85	HTSSOP-C64
4bit LVDS Driver									
BU90LV047A	Driver	4	—	LVC MOS	LVDS	250	3.0 to 3.6	-40 to +85	SSOP-B16
4bit LVDS Receiver									
BU90LV048	Receiver	4	—	LVDS	LVC MOS	250	3.0 to 3.6	-40 to +85	SSOP-B16
4bit LVDS Transceiver									
BU90LV049A	Transceiver	4	—	LVC MOS/LVDS	LVC MOS/LVDS	250	3.0 to 3.6	-40 to +85	SSOP-B16

Clockless Link Interface ICs

Clockless Link Serializer/Deserializer											
Part No.	Type	Input Specification	Output Specification	No. of Rx	No. of Tx	Clock Frequency (MHz)	Clockless Transfer Rates (Gbps)	Parallel BUS Width (bit)	Supply Voltage (V)	Operating Temperature (°C)	Package
BU17074KV	Serializer Deserializer	LVC MOS/ Clockless Link	Clockless Link/ LVC MOS	—/1	1/—	20 to 75	2.7	28	2.3 to 3.6	-40 to +85	VQFP64
BU17101AKV-M	Serializer	LVC MOS	Clockless Link	—	1	30 to 51	1.63	24	2.3 to 3.6	-40 to +85	VQFP48
BU17102AKV-M	Deserializer	Clockless Link	LVC MOS	1	—	30 to 51	1.63	24	2.3 to 3.6	-40 to +85	VQFP48

Timing Controllers

Timing Controller for FHD, WUXGA									
Part No.	Supply Voltage (V)	Input Specification	Output Specification	Input bits (bit)	Output bits (bit)	Clock Frequency (MHz)	Resolution	Operating Temperature (°C)	Package
BU90AM4-03	1.2/1.8/1.8 to 3.3	MIPI DSI 4 lane	iSP 8 lane	8/6	8/6	200	1,920×1,200	-20 to +70	UQFN54
BU8179MWV	1.2/1.8/3.3	eDP1.2 2 lane	iSP 6 lane	8/6	8/6	200	1,920×1,280	-20 to +85	UQFN46
BU90AD2-01	1.2/1.8/3.3	eDP1.2 2 lane	iSP 8 lane	8/6	8/6	170	1,920×1,280	-40 to +85	UQFN54
BM91AD2-01	1.2/1.8/3.3	eDP1.3 2 lane	iSP 8 lane	8/6	8/6	160	1,920×1,280	-20 to +85	UQFN60
New BU90AL210-M	1.5/3.3	LVDS Dual	mini-LVDS 6pair Dual	8/6	8/6	240	2,880×1,080	-40 to +105	HTQFP100V
New BU90AL211-M	1.5/3.3	LVDS Dual	mini-LVDS 6pair Single	8/6	8/6	180	1,920×1,080	-40 to +105	UQFP80

Multiple Input Switch Monitor LSIs

22ch Models									
Part No.	Supply Voltage (V)	Switch Input Number	Switch Input Voltage Range (V)	Wetting Current (mA)	Operating Current Intermittent Monitoring 50ms(Max.)	Control I/F	Clock Frequency (MHz)	Operating Temperature (°C)	Package
BD3375MUV-M	8.0 to 26 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	22	-14 to +40	1/3/5/10/15(Pull up/Pull down)	100μA	SPI	up to 4.4	-40 to +125	VQFN48MVCV070
BD3375KV-C	8.0 to 26 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	22	-14 to +40	1/3/5/10/15(Pull up/Pull down)	100μA	SPI	up to 4.4	-40 to +125	VQFP48C
33ch Models									
BD3377MUV-M	6.0 to 28 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	33	-14 to +40	1/3/5/10/15 (Pull up/Pull down)	110μA	SPI	up to 4.4	-40 to +125	VQFN48MDV070
New BD3377EKV-C	6.0 to 28 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	33	-14 to +40	1/3/5/10/15 (Pull up/Pull down)	110μA	SPI	up to 4.4	-40 to +125	HTQFP64BV
10ch Models									
BD3376MUV-M	8.0 to 26 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	10	-14 to +40	1/3/5/10/15(Pull up/Pull down)	100μA	SPI	up to 4.4	-40 to +125	VQFN28SV5050
BD3376EFV-C	8.0 to 26 (VPUA/VPUB) 3.1 to 5.25 (VDDI)	10	-14 to +40	1/3/5/10/15(Pull up/Pull down)	100μA	SPI	up to 4.4	-40 to +125	HTSSOP-B30

IrDA Controllers

IrDA SIR Encoder/Decoder						
Part No.	Supply Voltage(V)		Data Rate (bps)	Clock Frequency (Hz)	I/F	Package
	V _{DD}	V _{IO}				
BU92001KN	2.50 to 3.50	—	2.4k to 115.2k	24M to 29.5M	UART	VQFN20
IrDA SIR, MIR, FIR, IrSimple Controllers/Remote Control Transmitters						
BU92747GUW	1.62 to 1.98	1.62 to 3.60	2.4k to 115.2k, 0.576M, 1.152M, 4M	48M	Parallel BUS (16bit)	VBGA048W040
BU92747KV	1.62 to 1.98	1.62 to 3.60	2.4k to 115.2k, 0.576M, 1.152M, 4M	48M	Parallel BUS (16bit)	VQFP48C

LIN Transceivers

LIN Transceivers								
Part No.	Supported Standards	Supply Voltage (V)	Operating Temperature (°C)	Absolute Maximum Rating of LIN pin (V)	Baud Rates (kbps)	Supply Current at Sleep Mode (μA)	Package	Automotive Grade AEC-Q100
BD41030FJ-C	LIN2.0, LIN2.1, LIN2.2, LIN 2.2A	5 to 27	-40 to +125	-27 to +40	20(Max.)	3 (Typ.)	SOP-J8	YES
New BD41030HFN-C	LIN2.0, LIN2.1, LIN2.2, LIN 2.2A	5 to 27	-40 to +125	-27 to +40	20(Max.)	3 (Typ.)	HSO8	YES

CXPI Transceiver

CXPI Transceiver								
Part No.	Supported Standards	Supply Voltage (V)	Operating Temperature (°C)	Absolute Maximum Rating of BUS (V)	Baud Rates (kbps)	Supply Current at Sleep Mode (μA)	Package	Automotive Grade AEC-Q100
New BD41000AFJ-C	JASO_D015_3	7 to 18	-40 to +125	-27 to +40	5 to 20	3(Typ.)	SOPJ-8	YES

PLC(Power Line Communication)

HD-PLC Inside Compliant Baseband IC											
Part No.	Supported Standards	Operating Frequency Band	Supply Voltage (V)	Modulation Method	FEC Mode	Control I/F	Communication Speed	Transmission Output	Receiving Sensitivity	Operating Temperature (°C)	Package
BU82204MWV	HD-PLC inside	2 to 28MHz	1.45 to 1.55 3.0 to 3.6	Wavelet OFDM	AES128	UART or SPI	up to 3Mbps	-10dBm/10KHz	-88dBm/10KHz	-40 to +85	UQFN88MV0100
Broadband Power Line Communication Baseband IC											
BU82205MWV	ROHM Original PLC	2 to 28MHz	1.45 to 1.55 3.0 to 3.6	Wavelet OFDM	AES128	UART or SPI	up to 3Mbps	-10dBm/10KHz	-88dBm/10KHz	-40 to +85	UQFN88MV0100

USB Type-C Power Delivery

USB Type-C Power Delivery Controllers

For POWER SOURCE (POWER Role:Source, DATA Role:DFP, Variable OCP, Variable OVP, Internal Vconn SW)

Part No.	Supply Voltage (V)	IO Supply Voltage (V)	TYPE-C/PD Controller	Initial Supply Capable Voltage/Current (V/A)	Tolerant Voltage at CC Pins(V)	Gate Drivers for Nch FET	After OCP Behavior After OVP Behavior	DP Alternate Mode	Internal Shunt Reg.	Operating Temperature (°C)	Package	
New BM92A20MWV	3.1 to 20	1.7 to 5.5	✓/✓	5/3, 12/3, 15/3, 16/2.8, 19/2.36, 19.6/2.29, 20/2.25	6	For Source: 1pair	OCP: Automatic recovery OVP: Automatic recovery	—	—	-30 to +105	UQFN40V5050A	
New BM92A21MWV				5/3, 9/3, 15/3, 20/3		For Source: 1pair	OCP: Automatic recovery OVP: Automatic recovery				UQFN40V5050A	
☆BM92A26MWV				5/2.4, 14.8/2		For Source: 1pair	OCP: Automatic recovery OVP: Automatic recovery				UQFN40V5050A	
New BM92A50MWV				5/0.5, 12 to 20 Variable/ 2.25		For Source: 2pair	OCP: Automatic recovery OVP: Automatic recovery				UQFN40V5050A	
New BM92A56MWV				Variable PDO18W, 27W, 45W, 60W		For Source: 2pair	OCP: Automatic recovery OVP: Automatic recovery				UQFN40V5050A	
☆BM92A70MWV				5/0.5, 12 to 20 Variable/ 2.25		For Source: 2pair	OCP: Automatic recovery OVP: Automatic recovery				DP_SINK Auto	UQFN40V5050A
☆BD93W20F				4.75 to 20		—	✓/✓				5/3, 9/3, 15/3, 20/3	25.2
☆BD93W26F	5/3, 9/3, 12/3, 15/3, 20/3	25.2	For Source: 1Driver		OCP: Automatic recovery OVP: Automatic recovery			—	—	—	—	SOP16

For POWER SOURCE & SINK (POWER Role:Source/Sink, DATA Role:DRP)

Part No.	Supply Voltage (V)	IO Supply Voltage (V)	TYPE-C/PD Controller	Connected The Required Initial Voltage(V) Dead Battery	Non Dead Battery	Gate Drivers for Nch FET	Internal Vconn SW	DP Alternate Mode	Internal Shunt Reg.	Operating Temperature (°C)	Package
BM92A30MWV	3.1 to 20	1.7 to 5.5	✓/✓	5, 12 to 20 Variable Depends on the opposite side	5	For Sink: 1pair For Source: 1pair	✓	DP_SOURCE	—	-30 to +105	UQFN40V5050A

For POWER SINK (POWER Role:Sink, DATA Role:UFP)

Part No.	Supply Voltage (V)	IO Supply Voltage (V)	TYPE-C/PD Controller	Connected The Required Initial Voltage(V) Without Ext-MCU	Start of Automatic Power Receiving Without Ext-MCU	Gate Drivers for Nch FET	Internal Vconn SW	DP Alternate Mode	Internal Shunt Reg.	Operating Temperature (°C)	Package
New BM92A11MWV	3.1 to 20	1.7 to 5.5	✓/✓	5, 12	✓	For Sink: 1pair For Source: 1pair	✓	—	—	-30 to +105	UQFN40V5050A
New BM92A12MWV				5, 20							UQFN40V5050A
New BM92A13MWV				5, 15							UQFN40V5050A
New BM92A14MWV				5, 9							UQFN40V5050A
New BM92A15MWV				5 to 20 Depends on the opposite side							UQFN40V5050A
☆BM92A31MWV				5, 12							UQFN40V5050A
☆BM92A32MWV				5, 20							UQFN40V5050A
☆BM92A33MWV				5, 15							UQFN40V5050A
☆BM92A34MWV				5, 9							UQFN40V5050A
☆BM92A35MWV				5 to 20 Variable							UQFN40V5050A

☆ : Under Development