

Standard Logic

Switch & IPD & Multiplexer & Logic

Analog Switch/Analog Switch (Single type)											
Type	Package/Part No.			Function	Supply Voltage (V)	Input Voltage (V)		ON Resistance (Max) (Ω)	Control-Output Propagation Delay Time (Typ) (ns)	IN-Out Propagation Delay Time (Typ) (ns)	Max Propagation Frequency (Typ) (MHz)
	SOP14	SSOP-B14	SSOP5			H Level (Min)	L Level (Max)				
BU4066BC	BU4066BCF	BU4066BCFV	—	Quad Analog Switch	3 to 18	3.5	1.5	950	60	20	—
BU4S66	—	—	BU4S66G2	Single Analog Switch	3 to 16	3.5	1.5	950	80	15	—

Multiplexer											
Type	Package/Part No.		Function	Supply Voltage (V)	Input Voltage (V)		ON Resistance (Max) (Ω)	Control-Output Propagation Delay Time (Typ) (ns)	IN-Out Propagation Delay Time (Typ) (ns)	Max Propagation Frequency (Typ) (MHz)	
	SOP16	SSOP-B16			H Level (Min)	L Level (Max)					
BU4051BC	BU4051BCF	BU4051BCFV	Analog Multiplexer/Demultiplexer (8↔1)	3 to 18	3.5	1.5	950	170	15	20	
BU4052BC	BU4052BCF	BU4052BCFV	Dual Analog Multiplexer/Demultiplexer (4↔1)	3 to 18	3.5	1.5	950	170	15	20	
BU4551B	BU4551BF	BU4551BFV	Quad Analog Multiplexer/Demultiplexer (2↔1)	3 to 16	3.5	1.5	1,100	360	35	15	

Logic Gates											
Type	Package/Part No.		Function	Supply Voltage (V)	Input Voltage (V)		Hysteresis Voltage (V)	Output Voltage $I_{OL}=0\text{mA}$ (V)		Propagation Delay Time (Typ) (ns)	
	SOP14	SSOP-B14			H Level (Min)	L Level (Max)		H Level (Min)	L Level (Max)		
BU4030B	BU4030BF	—	Quad ExclusiveOR Gate	3 to 16	3.5	1.5	—	4.95	0.05	90	

Logic Gates (Single type)											
Type	Package/Part No.	Function	Supply Voltage (V)	Input Voltage (V)		Hysteresis Voltage (V)	Output Voltage $I_{OL}=0\text{mA}$ (V)		Propagation Delay Time (Typ) (ns)		
	SSOP5			H Level (Min)	L Level (Max)		H Level (Min)	L Level (Max)			
BU4S01	BU4S01G2	Single NOR Gate	3 to 16	3.5	1.5	—	4.95	0.05	85		
BU4S11	BU4S11G2	Single NAND Gate	3 to 16	3.5	1.5	—	4.95	0.05	85		
BU4SU69	BU4SU69G2	Single Unbuffer Inverter	3 to 16	4.0	1.0	—	4.95	0.05	55		
BU4S71	BU4S71G2	Single OR Gate	3 to 16	3.5	1.5	—	4.95	0.05	90		
BU4S81	BU4S81G2	Single AND Gate	3 to 16	3.5	1.5	—	4.95	0.05	90		
BU4S584	BU4S584G2	Single Schmitt Trigger	3 to 16	3.5	1.5	0.15 to 0.60	4.95	0.05	125		

Automotive Logic Gate (Single type)							
Type	Package/Part No.	Function	Supply Voltage (V)	H Input Voltage (Min) (V)	L Input Voltage (Min) (V)	Operating Temperature (°C)	Output Delay Time (Typ) (ns)
	SSOP5						
New BD7LS02	BD7LS02G-C	Single 2-input NOR gate	1.65 to 5.5	$V_{CC} \times 0.7$	$V_{CC} \times 0.3$	-40 to +125	2.8
New BD7LS08	BD7LS08G-C	Single 2-input AND gate	1.65 to 5.5	$V_{CC} \times 0.7$	$V_{CC} \times 0.3$	-40 to +125	2.3
New BD7LS07	BD7LS07G-C	Single Buffer with Open-drain	1.65 to 5.5	$V_{CC} \times 0.7$	$V_{CC} \times 0.3$	-40 to +125	1.2
New BD7LS125	BD7LS125G-C	Single 3-state Buffer	1.65 to 5.5	$V_{CC} \times 0.7$	$V_{CC} \times 0.3$	-40 to +125	2.6

Function Logic												
Type	Package/Part No.		Function	Supply Voltage (V)	Input Voltage (V)		Output Voltage $I_{OL}=0\text{mA}$ (V)		Propagation Delay Time (Typ) (ns)	Max Clock Frequency (Typ) (MHz)	Set up Time (Typ) (ns)	Hold Time (Typ) (ns)
	SOP16	SSOP-B16			H Level (Min)	L Level (Max)	H Level (Min)	L Level (Max)				
BU4094BC	BU4094BCF	BU4094BCFV	8-Stage Shift/Store Register (3-State)	3 to 18	3.5	1.5	4.95	0.05	420	2.5	20	10

Serial-in/Parallel-out Drivers

Serial/Parallel 2-input Drivers							
Part No.	Serial Number of Input	Parallel Number of Output	Supply Voltage (V)	Max Output Current (mA)	Max Output Voltage (V)	Output type	Package
BU2098F	2	8	2.7 to 5.5	25	15	Open drain	SOP16
BU2090F	2	12	2.7 to 5.5	25	25	Open drain	SOP16
BU2090FS	2	12	2.7 to 5.5	25	25	Open drain	SSOP-A16

Serial/Parallel 4-input Drivers							
Part No.	Serial Number of Input	Parallel Number of Output	Supply Voltage (V)	Max Output Current (mA)	Max Output Voltage (V)	Output type	Package
BU2050F	4	8	4.5 to 5.5	25	5.5	CMOS	SOP14
BU2092F	4	12	2.7 to 5.5	25	25	Open drain	SOP18
BU2092FV	4	12	2.7 to 5.5	25	25	Open drain	SSOP-B20
BU2099FV	4	12	2.7 to 5.5	25	25	Open drain	SSOP-B20
BU2152FS	4	24	2.7 to 5.5	25	5.5	CMOS	SSOP-A32

Serial/Parallel 2-input Drivers: 2-wires Interface CLOCK, DATA
 Serial/Parallel 4-input Drivers: 4-wires Interface CLOCK, DATA, LATCH, ENABLE

USB Switch ICs

SP type (Single Pole)													
Part No.	Supply Voltage (V)		USB Switch (ch)	UART Switch (ch)	Circuit Current (μA)	USB Switch ON Resistance (Ω)	USB Switch ON Capacitance (pF)	Package					
	USB	UART											
BH6260MWX	2.9 to 3.7	1.7 to 3.6	1	1	0	5	10	USON016X3315					
DP type (Double Pole)													
BD11600NUX	2.5 to 5.5	—	1	—	18	3	6	VSON010X3020					
BD11603MWX	2.5 to 5.5	—	2	—	18	3	7	USON016X3315					
BD11601NUX	2.5 to 5.5	—	1	—	18	2.5	6	VSON008X2020					
BD11670GWL	3.8 to 28.0	—	1	—	26	5	6	UCSP50L1C					
Built-in OVP Micro USB Switch with USB2.0, MHL™ and Audio													
Part No.	Supply Voltage (V)			USB/MHL Switch (ch)	MIC Switch (ch)	HP Switch (ch)	VBUS Signal Path (ch)	ID-CBUS Path (ch)	OTG-VBUS Voltage Path (ch)	Stand by Current (μA)	USB/MHL Switch ON Resistance (Ω)	USB/MHL Switch ON Capacitance (pF)	Package
	VBUS	VBAT	VDDIO										
BD91411GW	3.8 to 28.0	2.9 to 4.6	1.7 to 3.0	2	1 (mono)	1	1	1	1	6	5	6	UCSP75M3

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IPD (IPS)

High Side Switch

L-shaped Protection Smart High Side Switch								
Part No.	Power Supply (V)	V _{DS} (Max) (V)	ch	I _{oCP} (Min) (A)	ON Resistance (Typ) (mΩ)	Thermal Shut Down	Package	Automotive Grade AEC-Q100
New BV2HC045EFU-C	6.0 to 19.0	41.0	2	21	45	Off-latch	HSSOP-C16	YES
New BV2HD045EFU-C	6.0 to 28.0	41.0	2	21	45	Self-restart	HSSOP-C16	YES
Smart High Side Switch								
Part No.	Power Supply (V)	V _{DS} (Max) (V)	ch	I _{oCP} (Min) (A)	ON Resistance (Typ) (mΩ)	Thermal Shut Down	Package	Automotive Grade AEC-Q100
BV1HD090FJ-C	4.5 to 36.0	45.0	1	2.7	90	Self-restart	SOP-J8	YES
BD1HC500EFJ-C	4.0 to 18.0	44.5	1	0.8	500	Off-latch	HTSOP-J8	YES
BD1HC500FVM-C	4.0 to 18.0	44.5	1	0.8	500	Off-latch	MSOP8	YES
BD1HC500HFN-C	4.0 to 18.0	44.5	1	0.8	500	Off-latch	HSON8	YES
BD1HD500EFJ-C	4.0 to 18.0	44.5	1	0.8	500	Self-restart	HTSOP-J8	YES
BD1HD500FVM-C	4.0 to 18.0	44.5	1	0.8	500	Self-restart	MSOP8	YES
BD1HD500HFN-C	4.0 to 18.0	44.5	1	0.8	500	Self-restart	HSON8	YES
New BV1HJ045EFJ-C	6.0 to 28.0	45.0	1	5.0	45	Self-restart	HTSOP-J8	YES
New BV1HL045EFJ-C	6.0 to 28.0	45.0	1	2.5	45	Self-restart	HTSOP-J8	YES
New BV2HD070EFU-C	6.0 to 28.0	41.0	2	10	70	Self-restart	HSSOP-C16	YES

Low Side Switch

Smart Low Side Switch								
Part No.	Power Supply (V)	V _{DS} (Max) (V)	ch	I _{oCP} (Min) (A)	ON Resistance (Typ) (mΩ)	Thermal Shut Down	Package	Automotive Grade AEC-Q100
New BV1LB010FPJ-C	3.5 to 5.5	38	1	42	10	Self-restart	TO252-J3	YES
BV1LB028FPJ-C	3.0 to 5.5	42	1	30	28	Self-restart	TO252-J3	YES
BV1LB045FPJ-C	3.0 to 5.5	42	1	18	45	Self-restart	TO252-J3	YES
New BV1LF080EFJ-C	3.5 to 6.5	42	1	5.0	80	Self-restart	HTSOP-J8	YES
BV1LB085FJ-C	3.0 to 5.5	42	1	13	85	Self-restart	SOP-J8	YES
BV1LC105FJ-C	3.0 to 5.5	42	1	3	105	Self-restart	SOP-J8	YES
BV1LB150FJ-C	3.0 to 5.5	42	1	6.5	150	Self-restart	SOP-J8	YES
BV1LB300FJ-C	3.0 to 5.5	42	1	1.7	300	Self-restart	SOP-J8	YES
BV1LC300FJ-C	3.0 to 5.5	42	1	1.7	350	Self-restart	SOP-J8	YES
BD1LB500EFJ-C	3.5 to 5.5	42	1	0.8	350	Self-restart	HTSOP-J8	YES
BD1LB500FVM-C	3.5 to 5.5	42	1	0.8	350	Self-restart	MSOP8	YES
BM2LC105FJ-C	3.0 to 5.5	42	2	3	105	Self-restart	SOP-J8	YES
BM2LC120FJ-C	3.0 to 5.5	42	2	3	120	Self-restart	SOP-J8	YES
BM2LB110FJ-C	3.0 to 5.5	42	2	2.5	120	Self-restart	SOP-J8	YES
BM2LB150FJ-C	3.0 to 5.5	42	2	6.5	150	Self-restart	SOP-J8	YES
BM2LB300FJ-C	3.0 to 5.5	42	2	1.7	300	Self-restart	SOP-J8	YES
BM2LC300FJ-C	3.0 to 5.5	42	2	1.7	350	Self-restart	SOP-J8	YES
BD8LB600FS-C	3.0 to 5.5 (Digital)/ 4.0 to 5.5 (Analog)	45	8	1	600	Self-restart	SSOP-A24	YES
BD8LA700EFV-C	3.0 to 5.5 (Digital)/ 4.0 to 5.5 (Analog)	45	8	0.5	700	Off-latch	HTSSOP-B24	YES