

CMOS Gate array/BU1200 Series

●BU 1200 Series

Parameter		BU1200 Series					
		BU1205	BU1206	BU1201	BU1202	BU1203	BU1204
Integration number	No. of gates (2 inputs gate conversion)	156	288	460	793	1548	3025
	No. of bondings	24	32	40	52	72	100
	No. of I/O cells	22	30	38	50	70	98
Function	Supply voltage	Single 5V					
	Delay time (Internal gate)	3ns Typ. (Fo=3 AI=3mm)					
	Input-output level	CMOS / TTL					
	Toggle frequency	50MHz					

●BU 1210 Series

Parameter		BU1210 Series					
		BU1215	BU1216	BU1211	BU1212	BU1213	BU1214
Integration number	No. of gates (2 inputs gate conversion)	156	288	460	793	1548	3025
	No. of bondings	24	32	40	52	72	100
	No. of I/O cells	22	30	38	50	70	98
Function	Supply voltage	Single 3V					
	Delay time (Internal gate)	6ns Typ. (Fo=3 AI=3mm)					
	Input-output level	CMOS					
	Toggle frequency	25MHz					

Package

		GND pin		BU1205/BU1215	BU1206/BU1216	BU1201/BU1211	BU1202/BU1212	BU1203/BU1213	BU1204/BU1214
		GND	VDD						
Package, No. of pins	SIP	10	9	2	●				
	DIP	16	8	16	●				
		18	9	18	●	●			
		20	10	20	●				
		28	14	28		●	●	●	
	SDIP	18	9	18	●	●			
		22	11	22	●	●			
		24	12	24	●	●			
		30	15	30	●(24)	●	●		
	QFP	32	16	32	●	●	●		
		42	21	42	●(30)	●(38)	●	●	
		32	12	28	●(22)	●	●	●	
		44	17	39		●(38)	●	●	
	SQFP	64	25	53			●(50)	●(59)	●(59)
		80	12	52				●(70)	△
		56	22	49			△	△	
		80	33	72				△	
	SOP	100	Undecided	Undecided					△
		18	9	18	●				
		20	10	20	●				
	SSOP-A	28	14	28	●(22)	●(22)	●(22)	●	
		20	10	20	●	●			
		24	12	24	●	●			
	SZIP	24	19	5	△(20)				

●△:Development starts after receiving the order.

Parentthesized number is the maximum number of signal pins.Non-connection pins are identified on request.

Notes : About GND and VDD

- For multi pin type packages GND and VDD pins may be added to improve operation by reducing effects of noise.(GND and VDD pins are selectable)
- If simultaneous changes occur on the bus line frequently, we can present the best pin assignment after consultation.

Cell library

I/O buffer cell		Primitive cell		Macro cell	
Function	Number	Function	Number	Function	Number
Input buffer	9	Logic gate		Decoder	6
Output buffer	4	NAND	8	Encoder	2
Bi-directional buffer	2	NOR	8	Shift resistor	2
Oscillation cell	1	EX-OR	2	ADDER	2
Monostable multivibrator	1	EX-NOR	2	Counter	7
		Complex gate	4	Comparator	1
		Inverter	2	Flip-flop	4
		Buffer	5	Data selector / Multiplexer	6