SEMI E19.1-0697
PORT STANDARD FOR MECHANICAL INTERFACE OF WAFER CASSETTE TRANSFER, 100 mm (4 inch) PORT

The complete specification for this interface includes all general requirements of SEMI E19.

Table 1 Port Dimensions for 100 mm (4 in.) Wafer Cassette

Port Door	A1	73.02 mm ± 0.13 mm	(2.875 in. ± 0.005 in.)
	A2	73.02 mm ± 0.13 mm	(2.875 in. ± 0.005 in.)
	A3	9.53 mm ± 0.25 mm	(0.375 in. ± 0.010 in.)
Guide Rails	B1	90.17 mm ± 0.13 mm	(3.550 in. ± 0.005 in.)
	B2	82.55 mm ± 0.13 mm	(3.250 in. ± 0.005 in.)
	B3	6.35 mm ± 0.25 mm	(0.250 in. ± 0.010 in.)
	B4	6.35 mm ± 0.25 mm	(0.250 in. ± 0.010 in.)
	B5	17.78 mm (0.700 in.)	maximum
	B6	12.70 mm (0.500 in.)	minimum
	B7		
	B8	3.18 mm ± 0.25 mm	minimum
	B9	6.35 mm (0.250 in.)	maximum radius
Latch Pins	C1	81.25 mm ± 0.13 mm	(3.200 in. ± 0.005 in.)
	C2	6.35 mm ± 0.13 mm	(0.250 in. ± 0.005 in.)
	C3		
	C4		
	C5	3.18 mm ± 0.05 mm	(0.125 in. ± 0.002 in.)
	C6	6.35 mm ± 0.25 mm	(0.250 in. ± 0.010 in.)
	C7	Full spherical radius	
	C8	4.44 mm (0.175 in.)	minimum
Registration Pins	D1	101.60 mm ± 0.13 mm	(4.000 in. ± 0.005 in.)
	D2	50.80 mm ± 0.13 mm	(2.000 in. ± 0.005 in.)
	D3	114.30 mm ± 0.13 mm	(4.500 in. ± 0.005 in.)
	D4	57.15 mm ± 0.13 mm	(2.250 in. ± 0.005 in.)
	D5	6.35 mm ± 0.08 mm	(0.250 in. ± 0.003 in.)
	D6	10.16 mm ± 0.25 mm	(0.400 in. ± 0.010 in.)
	D7	Full spherical radius	
Latch Pin Force each	F1	1.36 kg (3 lb)	minimum
	F2	1.36 kg (3 lb)	minimum
Position of Cassette	G1	12.70 mm ± 0.25 mm	(0.500 in. ± 0.010 in.)
	G2	0.50 mm (0.020 in.)	maximum

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