Manufacturer	Seiko Epson Corp
Equipment Model	NS-7000
Equipment Type	Pick n Place
Vintage	05.12
Origin	Japan
Package type	QFP, TSOP, SOP, PGA, BGA, PLCC, LGA
Lead Count / Size	3 mm x 3 mm to 50 mm x 50 mm
Hand of Input/Output Arm	Rotator Hand
No. of Hands per Arm	4
No. of Sites	2 sites up to 8 sites (4x2)
Temperature Capability	Dual Temp [Ambient Hot (+50º to +130º)]
Device Alignment	Alignment pocket
Input Type (Load)	Tray
Output Type (Unload)	Tray
Binning	Max 6 bins (Auto Tray: 3, Manual Tray :3)
Equipment Version	SRC Version: SRC U12 23-MSM
	MMI Version: MMI U12 23-MSM
Test Mode	Quad (Pitch between sockets: 80 mm x 60 mm)
Interface	DIO, GPIB, RS232
Operation Method	Operation Panel, LCD, Mouse
OS	Windows 2000
Dimension	1649(W) x 1580 (D) x 1860 (H)
Weight	1150 kg (approx.)
Power Requirements	220V AC, 50/60 Hz, 6kVA
CDA	0.49 MPa (5kgf/cm2) 50 NQ/min

Note: Configurations are based on handler current status.

NS 7000 Motor Location and Specifications

Unit	Motor No.	Function	Voltage	Wattage	Current	Torque	Speed (Min-1)	Remarks
Index Unit	M1	Y-axis direction	200V	400W	2.6A	1.27N.m	3000	
	M3	Z-axis direction Index Unit (Test Arm 1 up/down)	200V	400W	2.6A	1.27N.m	3000	With Brake
	M4	U-axis direction (Test Arm 2 up/down)	200V	400W	2.6A	1.27N.m	3000	With Brake
Input Arm	M21	Y-axis direction	200V	400W	2.6A	1.27N.m	3000	
	M22	X-axis direction	200V	150W	1.8A	0.477N.m	3000	
	M23	Z-axis direction (Hand 1 up/down)	24V	2W approx.	0.75A / Phase			0.72^{o} Step Angle
	M24	Z-axis direction (Hand 2 up/down)						
	M25	Z-axis direction (Hand 3 up/down)						
	M26	Z-axis direction (Hand 4 up/down)						
Rotator Hand	M28	θ (theta) direction (Hand rotation)	24V	2W approx.	0.75A / Phase			
Output Arm	M31	Y-axis direction	200V	400W	2.6A	1.27N.m	3000	
	M32	X-axis direction	200V	150W	1.8A	0.477N.m	3000	
	M33	Z-axis direction (Hand 1 up/down)	24V	2W approx.	0.75A / Phase			0.72^{o} Step Angle
	M34	Z-axis direction (Hand 2 up/down)						
	M35	Z-axis direction (Hand 3 up/down)						
	M36	Z-axis direction (Hand 4 up/down)						
Rotator Hand	M38	θ (theta) direction (Hand rotation)	24V	2W approx.	0.75A / Phase			
Shuttle 1	M41	X-axis direction	200V	150W	1.8A	0.477N.m	3000	
Shuttle 2	M42	X-axis direction	200V	150W	1.8A	0.477N.m	3000	
Empty Tray Arm	M51	Empty tray transportation	200V	150W	1.8A	0.477N.m	3000	
Tray Loader	M191	Tray transportation	200V	6 W	0.15A			
Tray Unloader	M192	Tray transportation	200 V	6 W	0.15A			
	M193	Tray transportation						
	M194	Tray transportation						

Notes: M27 and M37 are not included because the hand of I/O arm configuration are rotator.