

スーパーコネクト用
分割投影露光装置

UX-7

先端パッケージプロセスに最適化したハイ・コスト・パフォーマンス ステッパ
High Cost Performance Stepper for the Advanced Package

高スループット
High Throughput

深い焦点深度
Deep Depth of Focus

マスクコストの低減
Reducing Mask Cost

高精度重ね合わせ
High Accuracy of Overlay Alignment

New Model
● Wafer Level Package
● Flip Chip
● System in Package



■ Exposure Sample

■ COO Comparison

AU Bump
UX-7 Step & Repeat Exposure System Resolution with AZ UT11-HR

Resolution

20μm L/S 10μm L/S 8μm L/S 6μm L/S

Depth of Focus

8μm L/S
10μm L/S
20μm L/S

-30μm -20μm -10μm 0 +10μm +20μm +30μm

Process Condition

Substrate: 6inch on Si Exposure: USHIO UX-7, 1000mj/cm²
Film Thickness: 20μm, Develop: AZ 303N(1:6)x300sec., (23deg/Dip)
Pre Bake: 115° CX300sec(HP)

W-CSP

Photo: by courtesy of Oki Electric Industry Co. Ltd

	USHIO UX-7	Conventional Stepper	Ushio High Intensity Proximity Aligner
Equipment Cost	△	×	○
Mask Cost	○	△	×
Lamp Cost	△	○	×
Throughput	△	×	○
Resolution/Overlay	△	○	×
COO	○	×	×

[Condition]
Wafer : φ8 Photoresist : LA900 20μm
Mask : Quartz Exp. Wavelength : 405nm, 436nm
Shot map : 22mm□×44shots

■ Specifications

	UX-7056SC(hg-line)	UX-7053SC(i-line)
Wafer Size	φ 12", 8", 6" Si, 0.3-1.0mmt	
Resolution	3μm (1μmt, TSMR8800)	
	NA 0.13 (variable)	NA 0.10 (variable)
DOF	±10μm	
Exposure Area	φ64mm	φ78mm
Exposure Wavelength	405nm, 436nm	365nm
Light Source	4.3kW Super-High Pressure Mercury Lamp	
Overlay Accuracy	±1.0μm (3σ)	
Mask	6" square Quartz	



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