No.		Item	Requirement	Comment
			Stealth Dicing Buyoff Criteria	
		Model		DFL7361
		Power	Single Phase 220V+/-7% 3 Phases 220V+/-7% 3 Phases 380V+/-7% UPS to let machine complete last step and safely shutdown, no wafer drop allowed	3 Phases 220V+/-7%
		Material	Silicon	Silicon
		Wafer Size	Bare wafer size: 8 inch & 12 inch Frame wafer size: 8 inch & 12 inch Conversion between 8" and 12" can be done by SYT Engineer and downtime less than 2hours Conversion between Bare Wafer Handling and Frame Handling can be done by Engineer and downtime less than 2 hours	Bare wafer size: 12 inch Exclusive
		Total Wafer Thickness tolerance	Max wafer thickness is <= 775 um Max Chip on Wafer tickness is is <= 775 um + 500um	775μm Base (APACT 725μm Runing) (@+ Laminate BG Tape Thickness)
		Dicing Side	Top/Back side dicing	Back side dicing
		Dicing Mode	Supports both SDAG, SDBG, SDTT	SDBG (Stealth Dicing → Back grind)
		Wafer load mode	Bare Wafer: Load/Unload from FOUP/Open cassette Frame Wafer: Load/Unload from frame cassette	FOUP (Carrier Type)
		Laser Engine	Laser Power: Output Power ≥ 6W; Point Power ≥ 2.5W（Single focus）	SDE06 Engine Type Output Power : 6.8W Over
		X axis	Dicing range：310mm, Wafer size config range：MAX 300mm，Scale resolution 0.0005 mm, Moving speed：1~1000mm/s	Dicing range：310mm Wafer size config range：MAX 310mm Scale resolution 0.0005 Within Moving speed：1,000mm/s
		Y axis	Dicing range：310mm, Wafer size config range：MAX 300mm, Scale resolution 0.0001 mm, Position accuracy：**1μm over 310mm**, Moving speed：200mm/s	Dicing range：310mm Wafer size config range：MAX 310mm Scale resolution 0.0005 Within Position accuracy：3μm over 310mm Within Moving speed：200mm/s
		Z axis	Defocus config range：-2.000~5.000mm，Position accuracy：0.1μm, Movement speed：50mm/s	Defocus config range：-2.000~5.000mm Position accuracy：1μm Within Movement speed：50mm/s
		θ axis	Max rotate angle：380°, Motor accuracy：0.039"(angle)	Max rotate angle：380° Motor accuracy：0.039"(angle)
1	Machine configuration	DFPC	Height compensation range：±20μm, Note:The actual height compensation accuracy are affected by chuck table faltness, tape thickness, wafer thickness and ect.	Maximum 1.5μm Within
		Autofocus recognize system	Has infrared camera and recognize pattern automaticaly from back side	OK
		Dicing Accuracy	Dicing edge to fiducial ±3um	±3μm
		Chuck Table Upper Surface Parallelism	(when Measuring at 22°C) 0.008 mm/210 mm 0.008 mm/310 mm	(when Measuring at 22°C) 0.008 mm/310 mm
		X/Y line straightness	<= 3um / 300mm	3μm Within
		Operate System	The machine have the touch screen, windows operate system, and it can be display the workpiece real-time processing status	OK
		Status Light	Contain Green/Yellow/Red 3 color light	Contain Green/Yellow/Red/White 4 color light (+@ : White Lamp / Laser Status)
		Transfer system	1. Transfer bare wafer to alignment, and transfer processed wafer to FOUP.The robot is capable to flip wafer before alignment station.	OK : FOUP (Carrier Type) Runing
			2. Transfer frame wafer to chuck table and position, and transfer processed frame wafer to frame cassette. The robot/transfer arm is able to flip the frame wafer for SDTT process.	No
		Water chilling unit	Provide cooling water for laser engine	OK (+@ X-axis)
		HEPA Filter	Separate installation at working room and transfer room	HEPA Filter System 2EA
		Focus Function	Single focus and dual focus Can be set by recipe to use either single focus or dual focus, no lens conversion required	OK (MACRO / MICRO Selection Use)
		Life time management for spare parts	Key spare parts life time management	OK
		Wafer ID	Can be read by OCR or scan by hand type scanner, and can key in it by manually	No
			Machine have a USB port for connect the hand type scanner	OK (APACT Not operating)
		Production record	Machine can record the information of operation/recipe/timestamp/error message/etc., and it can find out the product message by Wafer ID	Log View Function / OCR Function No
		Machine has different access level	Different accounts and passwords can be set with different access level by user: Operator, Maintenance	OK (User Level Mode selection)
		Recipe load function	Auto recipe selection by providing Wafer ID to host	OK (Auto recipe selection by providing lot card ID)
		Recipe Saving	>=1000 Recipes	

		Equipped with alarms for utilities - low water flow, low air pressure, low vacuum, etc.	Be capable	OK (Utility Interlock)
		Auto-Focus Unit	Perform height correction to make the SD layer position (height direction) even and stabilize the separation quality	OK (Height estimation function)
		High-Sensitivity Camera and Oblique Lighting	Yes	OK
		Backside reflectance measurement	Yes	OK
		Optical axis monitoring	Yes Beam profile: Monitors the laser intensity distribution Beam pointing: Monitors laser irradiation position	OK (Log View)
		Hasen Cut	Yes	OK (Has been CUT Function)
		Non Stop Check	Yes	OK (Kerf Check Function)
2	Network	Equipment should have general SECS/GEM compliance and have capability to support from follwing SEMI standard	SEMI E5-SEMI equipment communication standard 2 message content(SECS-II)	OK
			SEMI E30-Generic model for communications and control of SEMI equipment(GEM)	OK
			SEMI E37-High speed SECS message services(HSMS)	OK
		Equipment should support	SECS/GEM message for equipment status monitor and event/alarm messages, all these messages should be sent to host for further analysis	OK
		Equipment can	display short message on screen which was sent from host by terminal display messages(S10F3/S10F5)	OK
		If equipment is	required to support recipe download, any recipe which was created from equipment side, could be uploaded to host	OK
		SECS/GEMS	Equip SECS/GEM open ports	OK
3	Safety	Temperature	If surface temperature of certain area is higher than >40 degree celsius, a caution hot sticker must be attached.	OK (Temperature Interlock Function)
		ESD	There are ionizer placed at working area, and the parts which contact wafer directly have good ESD conditions. Static dissipation time<5 s（From ±1000V to ±100V）; Balance Voltage＜±35V	OK
			Surface Resistance (Pick up head, flipper, ceramic etc): 10^4 ~ 10^11Ω	OK
			Equipment Grounding (Machine surface and parts that are in contact with ESDS device) <1Ω Has the connect port for WRIST STRAP	OK
			Static Voltage (Machine surface and parts that are in contact with ESDS device) <50v	OK
		Safety	There are some EMO button on the front and side face, and this button must protected by cover	OK
			Machine surface has the English warning label	OK
		Manual	Spare part list, operation manual, maintain manual	OK
6		Other	Air gun: 1 set, Machine mount foot stand: 1 set.	OK