ADT Advanced Dicing Technologies

ADT Offers a Complete Catalog of Dicing Blades and Wheels to Suit Any Package Singulation Requirement

PACKAGE SINGULATION

BLADE IDENTIFICATION SHEET

- **Hubbed**

- **Annular**

- **Non-serrated**

- **Serrated**

Nickel Blades and Wheels for Plastic BGAs

ADT AccuCut Hubbed Nickel Wheels

Diamond Grit Size (µm)	Thickness (mil)	Exposure (mil)	Blade Finish
A = *17 µm* **B** = *30 µm* **C** = *50 µm* **D** = *70 µm*	**Max. Thickness** = *12 mils* **Tolerance** = { *+ 0* / *- 1* }	**Max. Exposure** = *90 mils* **Tolerance** = { *+ 5* / *- 0* }	**000** = *Standard* **SXX** = *Slits (4, 8, 16, 32)*

AccuCut BGA Part Number Example

B	0	6	7	0	-	Q	5	0	0	-	S	1	6
30 µm Grit Size	*Thickness = 6 mil*		*Exposure = 70 mil*			*Std Bond*	*Std Diamond Concentration*	*AccuCut*			*16 Slits*		

2" Nickel Blades[1]

Special 2" Nickel Blade Designator — *Internal Code*

4B776-3 X	X	X	-	XXX	-	X XX
O.D.	Diamond Grit Size (µm)	O.D. Shape		Thickness (mil)*		Thickness Tolerance*
0 = *55 mm* **1** = *50.1 mm* **2** = *50.2 mm* **3** = *50.4 mm* **4** = *50.6 mm* **5** = *50.8 mm* **6** = *51 mm* **7** = *51.2 mm* **8** = *51.4 mm* **9** = *52 mm* **A** = *58 mm* **B** = *56 mm* **C** = *54 mm*	**4** = *17* **5** = *30* **6** = *50* **7** = *70*	**0** = *Standard* **2** = *Serrated, 16 slots* **3** = *Serrated + Pre-dressed* **4** = *Irregular Serration* **5** = *Irregular Serration + Pre-dressed* **6** = *Serrated, 4 slots* **7** = *Serrated, 8 slots*		**(030)** = *3.0* ↓ **(120)** = *12.0*		**A** = *±.0001"* ** **B** = *±.0002"* ** **C** = *±.0003"* ** **D** = *±.0005"* **E** = *±.0005/-0.000"* **

For example: Part number **4B776-3251-070-CXX** *would be used to designate a nickel blade of 50.2 mm O.D., 30 µm diamond grit, pre-dressed, 7 mil thick and with a ±.0003" thickness tolerance.*

* *Depends on diamond grit size.*
** *Depends on blade thickness and diamond grit size.*
*** *All blades .005" and thicker are pre-dressed as standard.*
[1] *All Special 2" Nickel Blades have an I.D. of 40 mm.*
Other thicknesses, diameters, edge geometries and diamond grit sizes are available upon request.

Nickel Blades

Nickel Blade Designator — *Internal Code*

0X 776 - X	X	X	X	-	XXX	-	X XX
I.D	O.D.	Diamond Grit Size (µm)	Edge Geometry	O.D. Shape	Thickness (mil)*		Thickness Tolerance*
1 = *40 mm* **4** = *3.5"(88.9 mm)* **8** = *55 mm*	**2** = *2.188"* **3** = *3"* **4** = *4.6"*	**4** = *17* **5** = *30* **6** = *50* **7** = *70*	**0** = *Standard* **1** = *Serrated standard 16 slots* **2** = *Serrated, 8 slots* **4** = *Irregular Serration* **5** = *Serrated, 4 slots*	**0** = *Standard* **1** = *Pre-dressed***	**(030)** = *3.0* ↓ **(120)** = *12.0*		**A** = *±.0001"* ** **B** = *±.0002"* ** **C** = *±.0003"* ** **D** = *±.0005"* **E** = *+.0005"/ -.000"***

For example: Part number **01776-2511-070-CXX** *would be used to designate a nickel blade of 40 mm I.D., 2.188" O.D., 30 µm diamond grit, serrated with 16 slots, pre-dressed, 7 mil thick and with a ±.0003" thickness tolerance.*

* *Depends on diamond grit size.*
** *Depends on blade thickness and diamond grit size.*
*** *All blades .005" and thicker are pre-dressed as standard.*
Other thicknesses, diameters, edge geometries and diamond grit sizes are available upon request.

PACKAGE SINGULATION

Advanced Dicing Technologies

BLADE IDENTIFICATION SHEET

Sintered Blades for Plastic BGAs

Sintered Blades

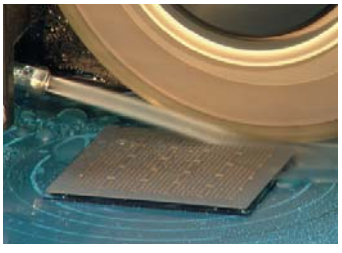
Sintered Blade Designator — *Internal Code* — *I - tenths (inch) or M - µm* — *Thickness* — *Internal Code*

4S0 X	X	- X	X	XX	- XXX X 11
Thickness Tolerance	Edge Geometry	O.D.	I.D.	Grit	Thickness
3 = ±.0002" **4** = ±.0005" **5** = ±.0010"	**0** = Standard (180°) **A** = 16 slots **B** = 32 slots **C** = 24 slots **D** = 4 slots **E** = 8 slots	**A** = 3.0" **B** = 2.5" **C** = 2.25" **D** = 2.188" **E** = 2.0" **F** = 58 mm **H** = 77 mm **I** = 60 mm **K** = 54 mm **M** = 56 mm **N** = 75 mm	**6** = 40 mm **A** = 55 mm	**30** = 30 **50** = 50	**050** = 50 **060** = 60 **100** = 100 ↓ **300** = 300

For example: Part number **4S030-A650-100 I 11** *would be used to designate a standard geometry metal sintered blade that has a 3" O.D., a 40 mm I.D., and 50 µm diamond grit, that is 10 mil ±.0002" thick.*

All ADT Sintered Blades are pre-dressed.
Other thicknesses, diameters, edge geometries and diamond grit sizes are available upon request.

Resin Blades for Ceramic BGAs



Resin Blades

Resin Blade Designator — *Internal Code*

X X 777	- X	XXX	- XXX - XXX
Blade Type	O.D. x I.D.	Diamond Grit Size (µm)	Thickness (mil)
1 = Serrated, 16 slots **2** = Shaped edge **4** = Blade I.D. 3.5" (88.9 mm) **5** = Serrated, 8 slots **6** = Serrated, 4 slots **8** = CBN	**0** = 4.0" x 2.75" **2** = 4.256" x 88.82 mm **3** = 3.0" x 40 mm **4** = 4.5" x 88.82 mm **5** = 5.0" x 88.82 mm **6** = 4.6" x 88.82 mm **7** = 4.7" x 88.82 mm	**(053)** = 53 **(063)** = 63 **(088)** = 88 **(105)** = 105 **(125)** = 125	**(008)** = 8 ↓ **(050)** = 50

For example: Part number **X5777-4006-006-XXX** *would be used to designate a serrated resin blade with 8 slots, that has an 88.82 mm I.D., a 4.5" O.D., and 6 µm diamond grit, that is 6 mil thick.*

All ADT Resin Blades are pre-dressed.
Other thicknesses, diameters, edge geometries and diamond grit sizes are available upon request.

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