Technical Specifications

3D Metrology

Product	Tip									Cantilever							Coating		Chip			
Order code	Material	Tip vertical edge height /VEH	Tip eff. length /l	Tip total with /d	Tip overhang /OH	Tip edge radius /r	Tilt comp. /θ	Pyramid height	Tip set back	Material	Shape	Length /L	Width /W	Thick-ness /T	Force Const. /k	Res.Freq. /f	Tip side	Back side	Length /L_chip	Width /B_chip	Thickness /D_chip	Allignment grooves
CDR130-EBD	130nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR130_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	300 nm (250-350 nm)	130 (+- 5 nm)	30 nm (20-35 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes
CDR70-EBD	70nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR70_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	300 nm (250-350 nm)	70 nm (+- 5 nm)	10 nm (5-10 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes
CDR50-EBD	50nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR50_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	200 nm (200-250 nm)	50 nm (+- 5 nm)	10 nm (5-10 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes
CDR40-EBD	40nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR40_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	150 nm (150-200 nm)	40 nm (+- 5 nm)	10 nm (5-10 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes
CDR30-EBD	30nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR30_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	150 nm (150-200 nm)	30 nm (+- 5 nm)	8 nm (5-10 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes
CDR20-EBD	20nm full carbon CD probe. Low vertical edge height, constant edge radius maintains resolution over tip life.																					
order#: CDR20_NCHR_3	**HDC/DLC**	10 nm (<15 nm)	150 nm (150-200 nm)	20 nm (+- 5 nm)	7 nm (>5 nm)	5 nm (<10 nm)	3° (+-0.5°)	15 µm (10 - 15 µm)	15 µm (5 - 25 µm)	Si	NT-TESPA	125 µm (+-2 µm)	30 µm (+-1 µm)	4 µm (3 - 5 µm)	42 N/m (35 - 45 N/m)	320 kHz (300-340 kHz)	none	reflex	3400 µm	1600 µm	315 µm	yes