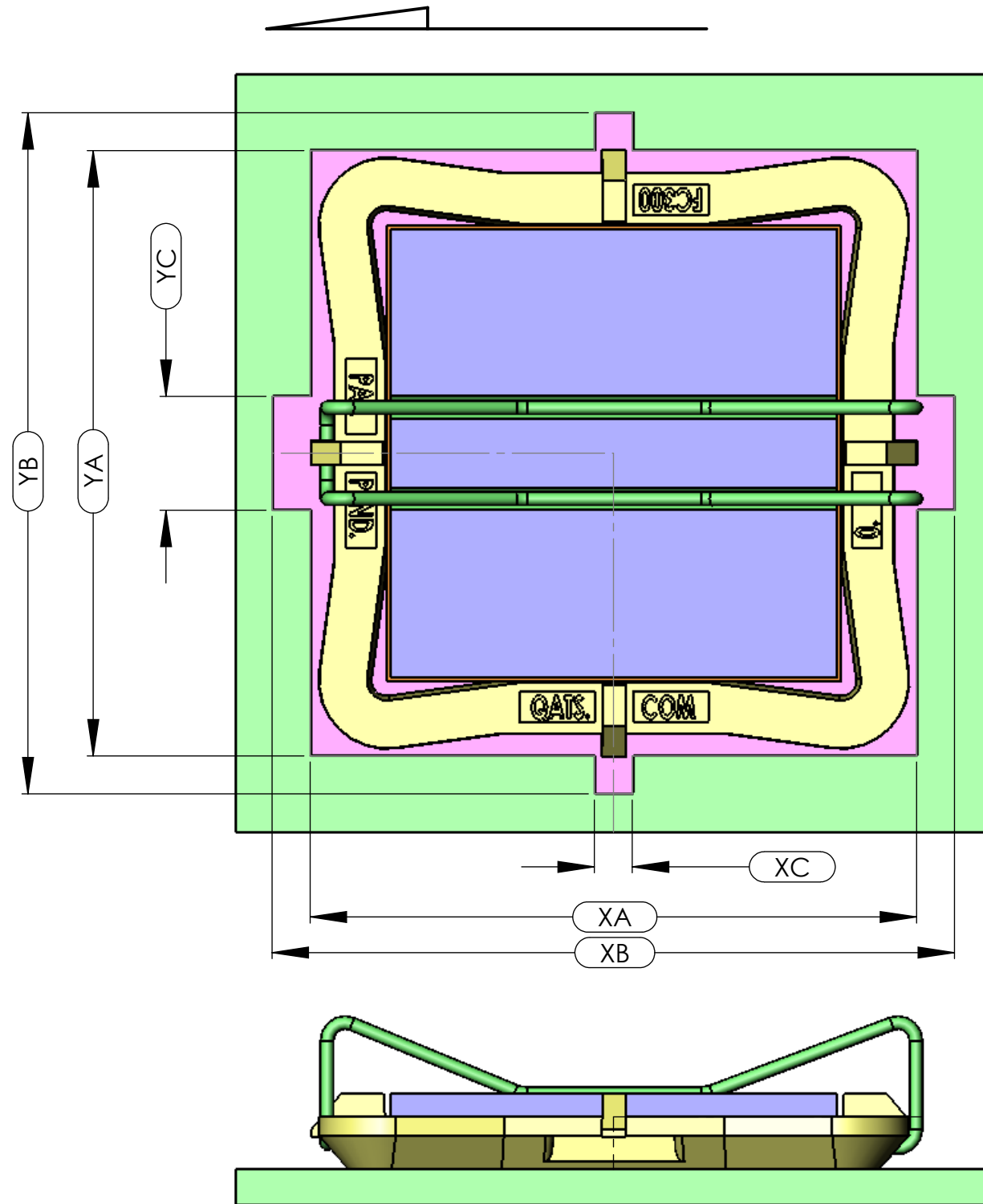


REVISIONS		
REV.	DESCRIPTION	DATE
R0	ORIGINAL DESIGN	5/31/07

NOTES:

1. ALL DIMENSIONS ARE IN MM.
2. FOR LAYOUT & DIMENSION SPECIFIC TO THE LEGACY FC425 & FC450 REFER TO SHEET 2
3. ADDITIONAL CONSTRAINS MAY APPLY IF / WHEN HEAT SINK ARE USED WITH LENGTH / WIDTH DIMENSION THAT EXCEED THE XA & YA DIMENSION SHOWN IN THE TABLE. PLEASE CONTACT ATS DESIGN ENGINEER FOR THESE APPLICATIONS.


DIRECTION OF AIR FLOW



**REQUIRED BOARD KEEP OUT REGION FOR
maxiGRIP HEAT SINK
ATTACHMENT HARDWARE**

FRAME CLIP	SPRING CLIP	NOM SIZE	XA	XB	XC	YA	YB	YC	COMMENTS
FC170	SC62	17.0	23.0	31.0	NA	23.0	23.0	11.0	
FC190	SC190	19.0	27.0	31.0	2.5	27.0	31.0	8.0	
FC210	SC210	21.0	29.0	33.0	2.5	29.0	33.0	8.0	
FC230	SC230	23.0	32.5	36.5	2.5	32.5	36.5	8.0	
FC250	SC250	25.0	34.0	38.0	2.5	34.0	38.0	8.0	
FC270	SC270	27.0	36.0	40.0	2.5	36.0	40.0	8.0	
FC290	SC290	29.0	38.5	42.5	2.5	38.5	42.5	8.0	
FC300	SC300	30.0	40.0	44.0	2.5	40.0	44.0	8.0	
FC310	SC310	31.0	41.0	45.0	2.5	41.0	45.0	8.0	
FC325	SC325	32.5	43.0	47.0	2.5	43.0	47.0	8.0	
FC330	SC330	33.0	43.5	47.5	2.5	43.5	47.5	8.0	
FC350	SC350	35.0	45.5	49.5	2.5	45.5	49.5	8.0	
FC375	SC375	37.5	48.5	52.5	2.5	48.5	52.5	8.0	
FC400	SC400	40.0	52.0	56.0	2.5	52.0	56.0	8.0	
FC425N	SC425N	42.5	54.5	58.5	2.5	54.5	58.5	8.0	SEE NOTE 2
FC450N	SC450N	45.0	57.0	61.0	2.5	57.0	61.0	8.0	SEE NOTE 2

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 <p>Advanced Thermal Solutions, Inc 89 Access Road #27 Norwood MA, 02062</p>	DWN: CDM	DESIGNER: CDM	APPROVED /RELEASED FOR ATS MANUFACTURE: WG 06/29/2007	SCALE: NTS	DATE: 06/29/2007	DWG. NO. ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO	LEVEL --
	DESCRIPTION: PWB CLEARANCE GUIDELINES FOR maxiGRIP			TOLERANCE: SEE TABLE	FINISH: NA	MATERIAL: NA	DRW UNITS: MM(IN)

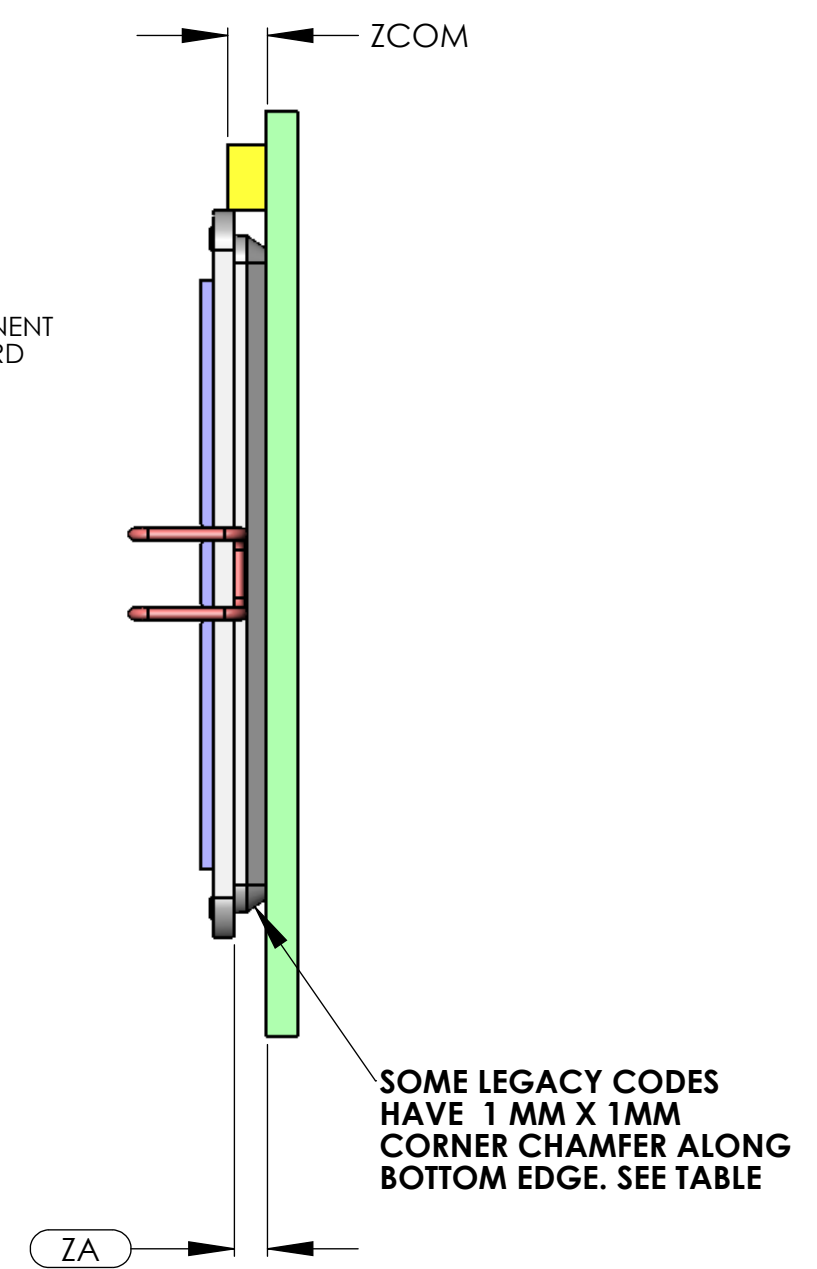
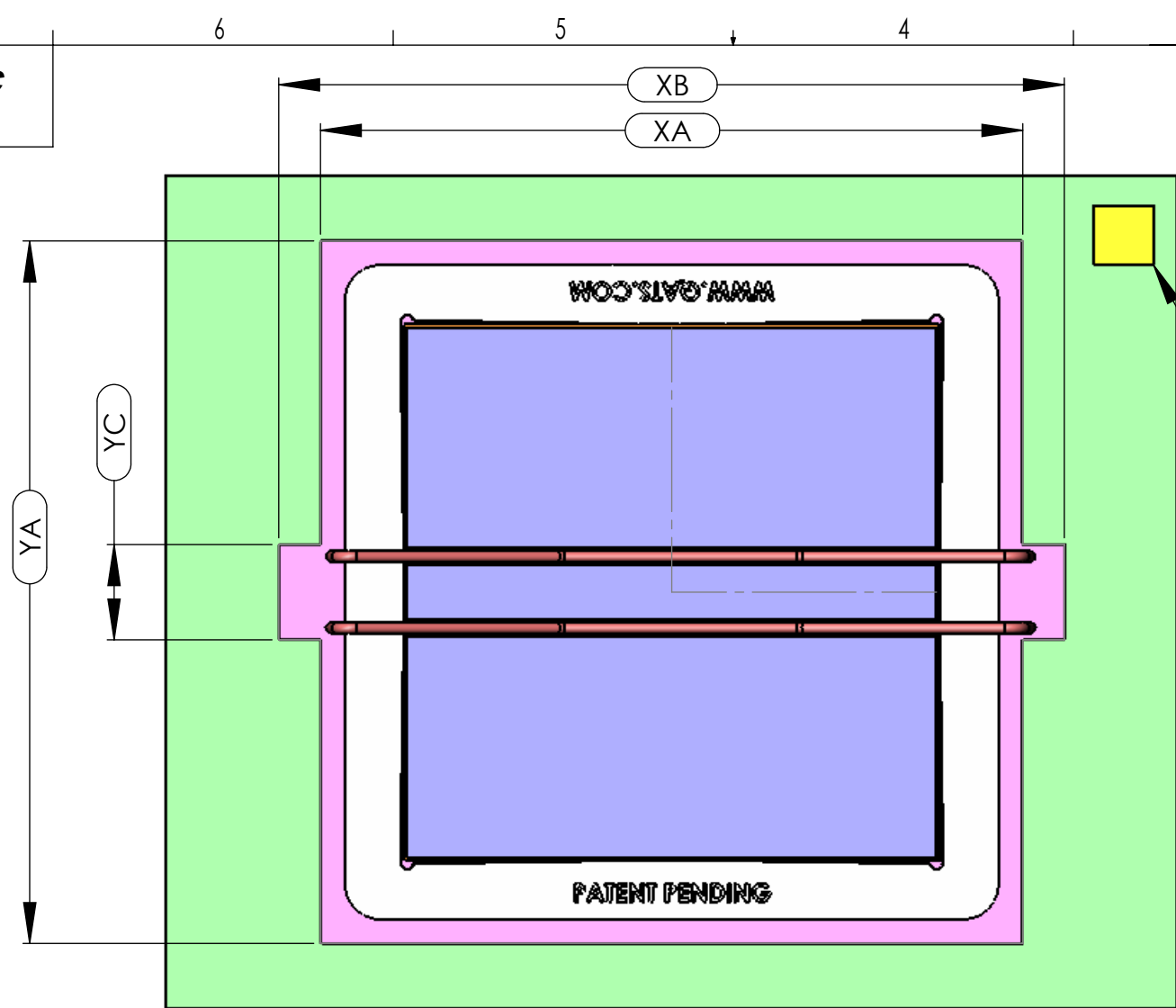
ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO PENDING OR PATENT 6308771

ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO Friday, June 29, 2007

ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO PATENT PENDING OR PATENT 6308771

**Advanced Thermal Solutions, Inc
PROPRIETARY**


DIRECTION OF AIR FLOW

REQUIRED BOARD KEEP OUT REGION FOR LEGACY maxiGRIP HEAT SINK ATTACHMENT HARDWARE (NO CORNER TABS)

FRAME CLIP	SPRING CLIP	NOM SIZE	XA for ZCOM < ZA	XA for ZCOM >= ZA	XB	YA for ZCOM < ZA	YA for ZCOM >= ZA	YC	ZA	COMMENTS
FC16	SC39	29.0	37.5	40.0	47.0	37.5	40.0	9.0	2.25	NO CORNER CHAMFER
FC20	SC40	35.0	43.5	47.5	54.5	43.5	47.5	8.0	2.00	NO CORNER CHAMFER
FC37	SC40	35.0	43.5	47.5	54.5	43.5	47.5	8.0	2.00	CORNER CHAMFER
FC425	SC425	42.5	51.5	54.5	63.5	51.5	54.5	8.0	1.50	NO CORNER CHAMFER
FC450	SC450	45.0	54.0	58.0	67.0	54.0	58.0	8.0	2.00	CORNER CHAMFER

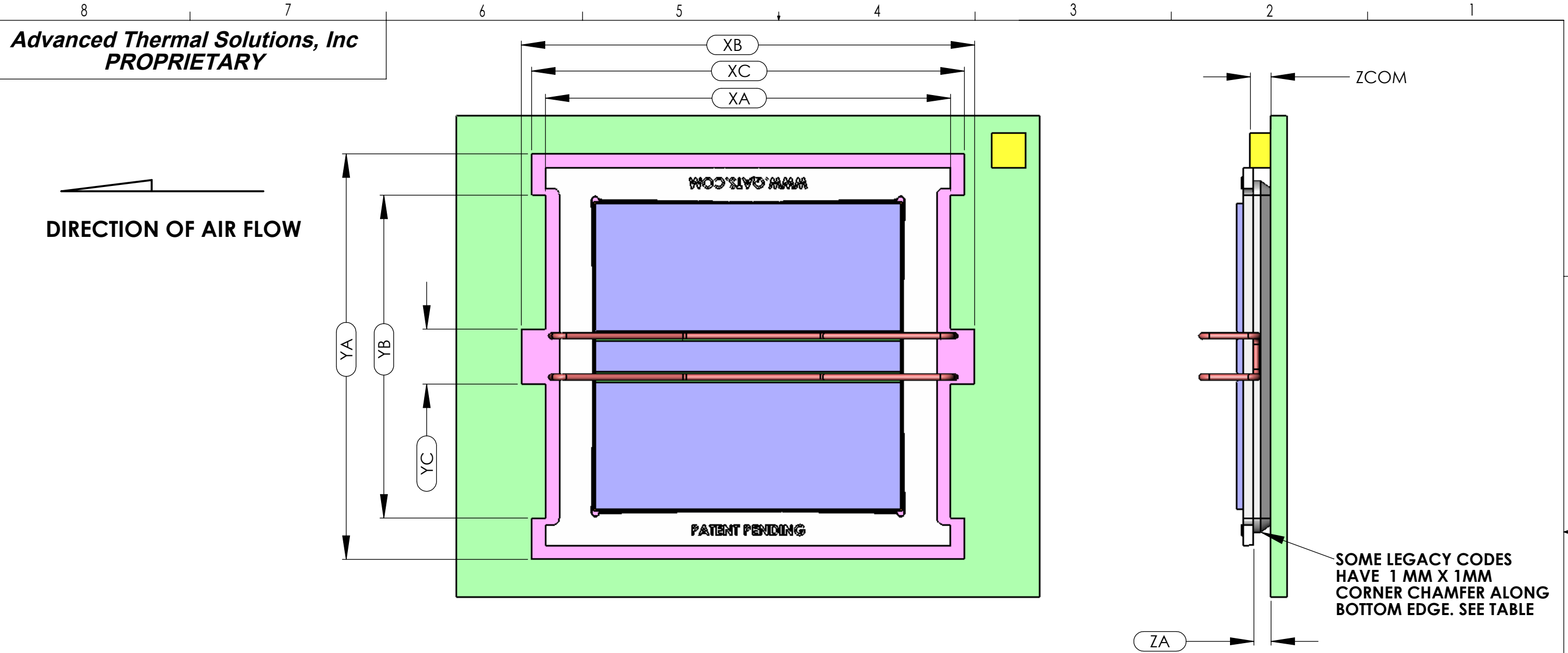
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	DESCRIPTION: PWB CLEARANCE GUIDELINES FOR maxiGRIP			TOLERANCE: SEE TABLE	FINISH: NA	MATERIAL: NA	DRW UNITS: MM(IN)

Friday, June 29, 2007

ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO

ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO PATENT PENDING OR PATENT 6308771



REQUIRED BOARD KEEP OUT REGION FOR LEGACY maxiGRIP HEAT SINK ATTACHMENT HARDWARE (CORNER TABS)

FRAME CLIP	SPRING CLIP	NOM SIZE	XA for ZCOM < ZA	XA for ZCOM >= ZA	XB	XC	YA for ZCOM < ZA	YA for ZCOM >= ZA	YB	YC	ZA	COMMENTS
FC05	SC36	21.0	28.5	31.5	37.5	35.5	27.5	31.5	22.0	10.0	2.2	NO CORNER CHAMFER
FC08	SC37	25.0	32.7	35.7	41.7	39.7	31.7	35.7	26.0	8.0	2.0	NO CORNER CHAMFER

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	DESCRIPTION: PWB CLEARANCE GUIDELINES FOR maxiGRIP			TOLERANCE: SEE TABLE	FINISH: NA	MATERIAL: NA	DRW UNITS: MM(IN)	SHEET# 3 OF 3	

ATS-MAXIGRIP_CLEARANCE_GUIDELINES-RO Friday, June 29, 2007