



# Extrusion Profiles

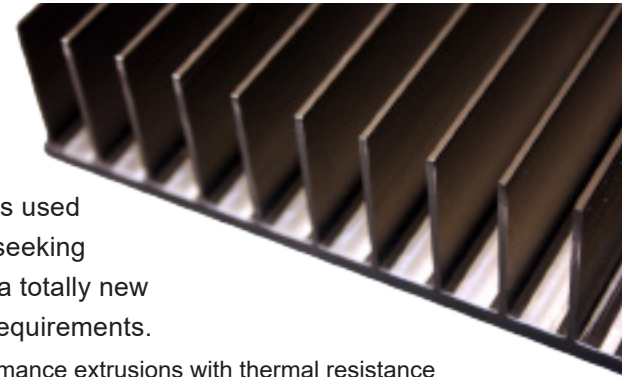
## RAPID PROTOTYPING AND MANUFACTURING FOR CUSTOM COOLING SOLUTIONS

Aluminum extrusions are the most cost-effective solutions for the majority of electronic cooling applications. ATS offers a wide variety of aluminum profiles used for heat sink fabrication and other aluminum applications. Whether you are seeking a standard extrusion profile or the expertise from our design team to create a totally new and innovative profile, ATS has the capabilities and expertise to meet your requirements.

### Extensive Capabilities

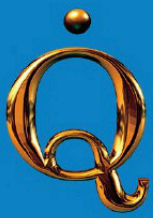
From its facilities in Norwood, MA and strategic partnerships throughout Southern China, ATS offers:

- » Design with ATS high performance extrusion profiles to eliminate tooling costs and reduce lead time
- » An extensive inventory of profiles in a wide variety of sizes, ranging from 40.9 - 482.9 mm in width and 9.9 - 72.9 mm in height
- » Custom profiles available upon request to meet your specific requirements, contact ATS at [ats-hq@qats.com](mailto:ats-hq@qats.com)
- » High performance extrusions with thermal resistance characteristics as low as 0.27°C/W
- » RoHS compliant, aluminum alloy 6061/6063
- » No minimum order quantity (MOQ) permitting you to order the exact quantity you require from prototype builds to high-volume production
- » All extrusion profiles unfinished (degreased) with custom finishes (anodization) available upon request to meet application-specific requirements
- » A wide variety of secondary metal fabrication services through ATS Manufacturing including precision cutting, milling, punching, drilling and notching to meet all your design requirements



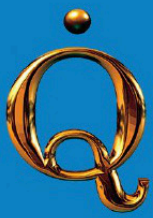
## Specifications (Parts also available in 1,220 mm lengths)

MPN	L (mm)	W (mm)	H (mm)	# of Fins	MPN	L (mm)	W (mm)	H (mm)	# of Fins	MPN	L (mm)	W (mm)	H (mm)	# of Fins
ATS-EXL58-300-R0	300	6	8	3	ATS-EXL75-300-R0	300	75.6	18.5	26	ATS-EXL105-300-R0	300	342	49.5	27
ATS-EXL59-300-R0	300	14	16	6	ATS-EXL76-300-R1	300	93.4	40	28	ATS-EXL108-300-R0	300	240	55	25
ATS-EXL60-300-R0	300	13.9	25.2	3	ATS-EXL77-300-R0	300	120.75	16.6	48	ATS-EXL109-300-R0	300	200	32.05	34
ATS-EXL61-300-R0	300	15	6	6	ATS-EXL78-300-R0	300	146	7.6	24	ATS-EXL110-300-R0	300	200	45	23
ATS-EXL62-300-R0	300	24.25	17.5	8	ATS-EXL1-254-R0	254	100.76	10	40	ATS-EXL113-300-R0	300	40	30	5
ATS-EXL63-300-R0	300	25	35	10	ATS-EXL2-254-R0	254	100.76	10	40	ATS-EXL114-300-R0	300	80	30	9
ATS-EXL64-300-R0	300	25	22	10	ATS-EXL6-254-R0	254	100.76	27	40	ATS-EXL115-300-R0	300	120	30	13
ATS-EXL65-300-R0	300	41	25	6	ATS-EXL7-254-R0	248	101	14	22	ATS-EXL116-300-R0	300	51.6	42.5	9
ATS-EXL66-300-R0	300	25.4	4	9	ATS-EXL312-300-R0	300	80.26	29.97	32	ATS-EXL117-300-R0	300	234	12.5	66
ATS-EXL67-300-R0	300	27.5	13.5	10	ATS-EXL424-288-R0	288	188	16.5	35	ATS-EXL118-300-R0	300	50.7	12.3	17
ATS-EXL68-300-R0	300	51	25	9	ATS-EXL98-300-R0	300	120	36	27	ATS-EXL119-300-R0	300	95	14	35
ATS-EXL69-300-R0	300	36	28.5	5	ATS-EXL99-300-R0	300	100	34.5	19	ATS-EXL120-300-R0	300	80	14	26
ATS-EXL70-300-R0	300	36	35.6	5	ATS-EXL100-300-R0	300	130	33.5	26	ATS-EXL121-300-R0	300	60	14	20
ATS-EXL71-300-R0	300	37	8	15	ATS-EXL101-300-R0	300	152.4	34.56	28					
ATS-EXL72-300-R0	300	40.75	6.58	15	ATS-EXL102-300-R0	300	179	27	23					
ATS-EXL73-300-R0	300	45	10	11	ATS-EXL103-300-R0	300	115	33.6	23					
ATS-EXL74-300-R0	300	70	15	28	ATS-EXL104-300-R0	300	107.8	34.29	23					

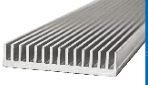
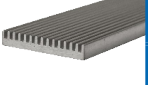
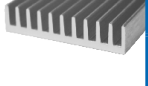
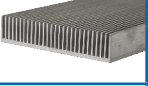
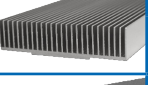




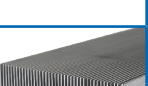

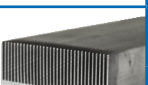
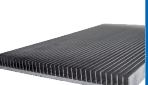



All thermal performance data for one inch of extrusion • All data is for  $T_{ambient} = 25^{\circ}C$  and  $P = 10W$

	MPN	L (mm)	W (mm)	H (mm)	# of Fins	R @ 200 lfm ( $^{\circ}C/W$ )	R @ 400 lfm ( $^{\circ}C/W$ )	R @ 600 lfm ( $^{\circ}C/W$ )	R @ 800 lfm ( $^{\circ}C/W$ )	R natural convection ( $^{\circ}C/W$ )	R @ 200 lfm ( $^{\circ}C/W$ ) Ducted
	ATS-EXL58-300-R0	300	6	8	3	45	26	20	17	65	18
	ATS-EXL58-1220-R0	1220									
	ATS-EXL59-300-R0	300	14	16	6	11	5.9	4.6	3.9	38	4.7
	ATS-EXL59-1220-R0	1220									
	ATS-EXL60-300-R0	300	13.9	25.2	3	11.5	8.4	7	6.1	21	6.8
	ATS-EXL60-1220-R0	1220									
	ATS-EXL61-300-R0	300	15	6	6	29	17	13.8	11.9	57	12.5
	ATS-EXL61-1220-R0	1220									
	ATS-EXL62-300-R0	300	24.25	17.5	8	5.2	3.6	2.9	2.6	17.9	3.5
	ATS-EXL62-1220-R0	1220									
	ATS-EXL63-300-R0	300	25	35	10	2.5	1.6	1.6	1.1	13	1.6
	ATS-EXL63-1220-R0	1220									
	ATS-EXL64-300-R0	300	25	22	10	3.9	2.4	1.9	1.7	18.5	2.3
	ATS-EXL64-1220-R0	1220									
	ATS-EXL65-300-R0	300	41	25	6	4.5	3.3	2.7	2.4	11.7	3.5
	ATS-EXL65-1220-R0	1220									
	ATS-EXL66-300-R0	300	25.4	4	9	24.8	15	12	10.5	55	17
	ATS-EXL66-1220-R0	1220									
	ATS-EXL67-300-R0	300	27.5	13.5	10	5.8	3.8	3.1	2.7	21.7	3.6
	ATS-EXL67-1220-R0	1220									
	ATS-EXL68-300-R0	300	51	25	9	3	2.1	1.8	1.6	9.6	2.3
	ATS-EXL68-1220-R0	1220									
	ATS-EXL69-300-R0	300	36	28.5	5	5.4	4	3.3	2.9	12.1	3.9
	ATS-EXL69-1220-R0	1220									
	ATS-EXL70-300-R0	300	36	35.6	5	4.2	3.1	2.5	2.2	9.7	3.1
	ATS-EXL70-1220-R0	1220									


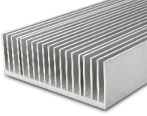
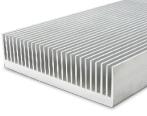
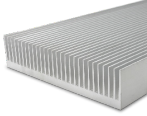
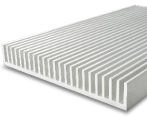


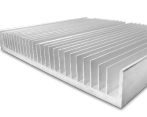

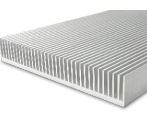
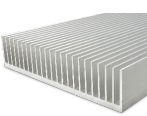


All thermal performance data for one inch of extrusion • All data is for  $T_{\text{ambient}} = 25^{\circ}\text{C}$  and  $P = 10\text{W}$

	MPN	L (mm)	W (mm)	H (mm)	# of Fins	R @ 200 lfm ( $^{\circ}\text{C}/\text{W}$ )	R @ 400 lfm ( $^{\circ}\text{C}/\text{W}$ )	R @ 600 lfm ( $^{\circ}\text{C}/\text{W}$ )	R @ 800 lfm ( $^{\circ}\text{C}/\text{W}$ )	R natural convection ( $^{\circ}\text{C}/\text{W}$ )	R @ 200 lfm ( $^{\circ}\text{C}/\text{W}$ ) Ducted
	ATS-EXL71-300-R0	300	37	8	15	9.5	5.2	4.1	3.5	36.4	4
	ATS-EXL71-1220-R0	1220									
	ATS-EXL72-300-R0	300	40.75	6.58	15	17.7	8.6	6.3	5.2	47.4	4.4
	ATS-EXL72-1220-R0	1220									
	ATS-EXL73-300-R0	300	45	10	11	6.8	4.7	3.9	3.4	18.6	4.2
	ATS-EXL73-1220-R0	1220									
	ATS-EXL74-300-R0	300	70	15	28	2.4	1.2	1.0	0.8	18.2	1.1
	ATS-EXL74-1220-R0	1220									
	ATS-EXL75-300-R0	300	75.6	18.5	26	1.4	1	0.8	0.7	9.7	1
	ATS-EXL75-1220-R0	1220									
	ATS-EXL76-300-R1	300	93.4	40	28	0.5	0.4	0.3	0.3	5.2	0.4
	ATS-EXL76-1220-R1	1220									
	ATS-EXL77-300-R0	300	120.75	16.6	48	1	0.6	0.5	0.4	12	0.6
	ATS-EXL77-1220-R0	1220									
	ATS-EXL78-300-R0	300	146	7.6	24	4.4	3.1	2.6	2.3	12	2.4
	ATS-EXL78-1220-R0	1220									
	ATS-EXL1-254-R0	254	100.76	10	40	2.2	1.3	1	0.9	15	1.2
	ATS-EXL1-1220-R0	1220									
	ATS-EXL2-254-R0	254	100.76	20	40	0.9	0.6	0.5	0.4	10	0.6
	ATS-EXL2-1220-R0	1220									
	ATS-EXL6-254-R0	254	100.76	27	40	0.7	0.5	0.4	0.3	7.9	0.5
	ATS-EXL6-1220-R0	1220									
	ATS-EXL7-254-R0	248	101	14	22	1.8	1.1	0.9	0.8	14.7	0.9
	ATS-EXL7-1220-R0	1220									
	ATS-EXL312-300-R0	300	80.26	29.97	32	0.8	0.5	0.4	0.4	10.7	0.5
	ATS-EXL312-1220-R0	1220									
	ATS-EXL424-288-R0	288	188	16.5	35	0.9	0.7	0.6	0.5	4.0	0.8
	ATS-EXL424-1220-R0	1220									



All thermal performance data for one inch of extrusion • All data is for  $T_{\text{ambient}} = 25^{\circ}\text{C}$  and  $P = 10\text{W}$

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	ATS-EXL98-300-R0	300	120	36	27	0.95	0.67	0.56	0.49	4.69	0.57
	ATS-EXL98-1220-R0	1220									
	ATS-EXL99-300-R0	300	100	34.5	19	1.14	0.83	0.69	0.61	4.34	0.8
	ATS-EXL99-1220-R0	1220									
	ATS-EXL100-300-R0	300	130	33.5	26	0.98	0.71	0.59	0.52	4.26	0.62
	ATS-EXL100-1220-R0	1220									
	ATS-EXL101-300-R0	300	152.4	34.56	28	0.85	0.61	0.51	0.45	3.59	0.56
	ATS-EXL101-1220-R0	1220									
	ATS-EXL102-300-R0	300	179	27	23	1.20	0.87	0.72	0.64	4.01	0.77
	ATS-EXL102-1220-R0	1220									
	ATS-EXL103-300-R0	300	115	33.6	23	1.12	0.81	0.67	0.59	4.61	0.71
	ATS-EXL103-1220-R0	1220									
	ATS-EXL104-300-R0	300	107.82	34.29	23	1.03	0.73	0.61	0.53	5.09	0.63
	ATS-EXL104-1220-R0	1220									
	ATS-EXL105-300-R0	300	342	49.5	27	0.59	0.43	0.36	0.32	2.04	0.49
	ATS-EXL105-1220-R0	1220									
	ATS-EXL108-300-R0	300	240	55	25	0.54	0.40	0.34	0.30	1.95	0.43
	ATS-EXL108-1220-R0	1220									
	ATS-EXL109-300-R0	300	200	32.05	34	0.71	0.51	0.43	0.38	3.09	0.47
	ATS-EXL109-1220-R0	1220									
	ATS-EXL110-300-R0	300	200	45	23	0.72	0.53	0.45	0.39	2.47	0.56
	ATS-EXL110-1220-R0	1220									

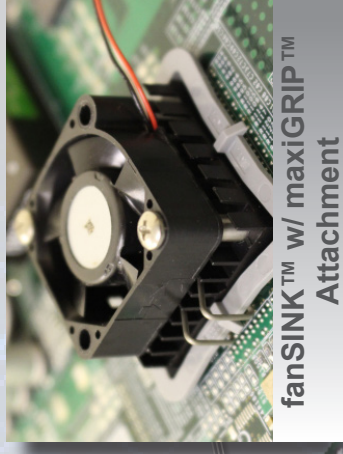


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	ATS-EXL113-300-R0	300	40	30	5	4.5	3.3	2.8	2.5	10.0	4.0
	ATS-EXL-113-1220-R0	1220									
	ATS-EXL114-300-R0	300	80	30	9	2.5	1.8	1.5	1.4	6.2	2.2
	ATS-EXL114-1220-R0	1220									
	ATS-EXL115-300-R0	300	120	30	13	1.7	1.3	1.1	0.9	4.6	1.5
	ATS-EXL115-1220-R0	1220									
	ATS-EXL116-300-R0	300	51.6	42.5	9	1.9	1.4	1.2	1.0	5.7	1.5
	ATS-EXL116-1220-R0	1220									
	ATS-EXL117-300-R0	300	234	12.5	66	1.1	0.7	0.6	0.5	6.9	0.6
	ATS-EXL117-1220-R0	1220									
	ATS-EXL118-300-R0	300	50.7	12.3	17	4.0	2.6	2.1	1.8	19.9	2.3
	ATS-EXL118-1220-R0	1220									
	ATS-EXL119-300-R0	300	95	14	35	2.1	1.2	1.0	0.8	14.7	1.0
	ATS-EXL118-1220-R0	1220									
	ATS-EXL120-300-R0	300	80	14	26	2.4	1.6	1.3	1.1	13.0	1.4
	ATS-EXL120-1220-R0	1220									
	ATS-EXL121-300-R0	300	60	14	20	3.2	2.0	1.7	1.5	16.1	1.8
	ATS-EXL121-1220-R0	1220									



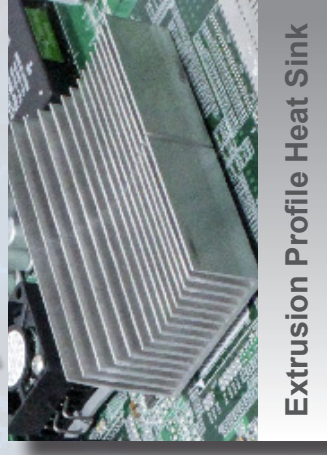
**Power Brick Heat Sink**



**fanSINK™ w/ maxiGRIP™ Attachment**



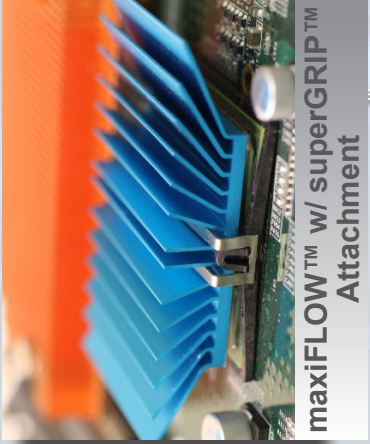
**Standard Board Level Heat Sink**



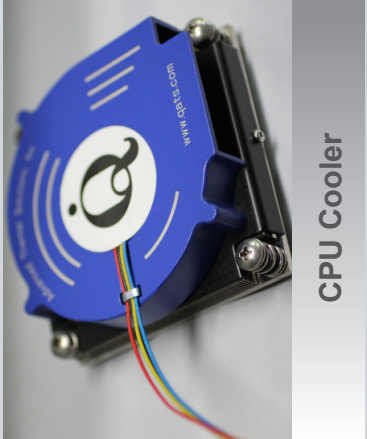
**Extrusion Profile Heat Sink**



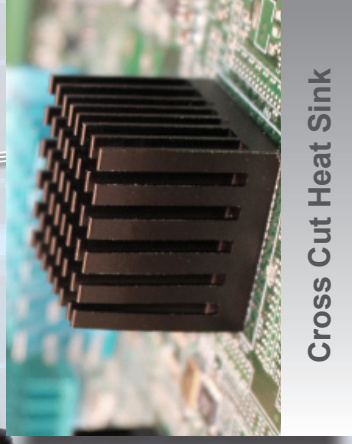
**Heat Pipe Assembly**



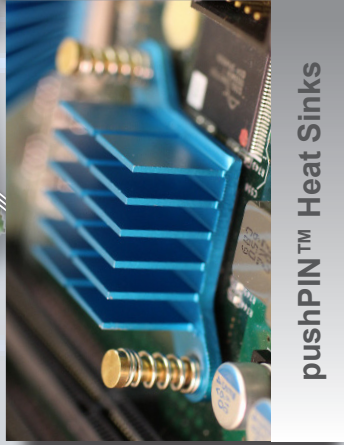
**maxiFLOW™ w/ superGRIP™ Attachment**



**CPU Cooler**



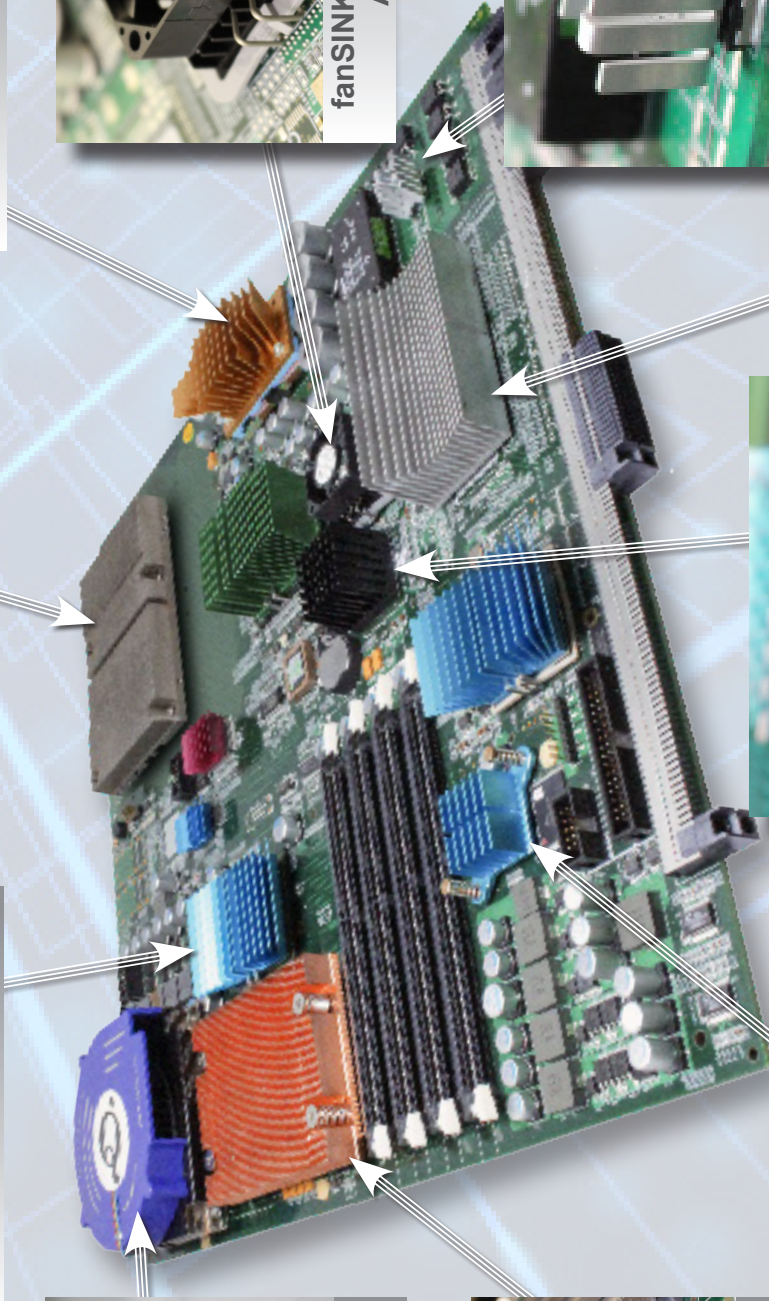
**Cross Cut Heat Sink**



**pushPIN™ Heat Sinks**



**Ultra Low Profile w/ Push Pin Attachment**



# #WeCoverTheBoard