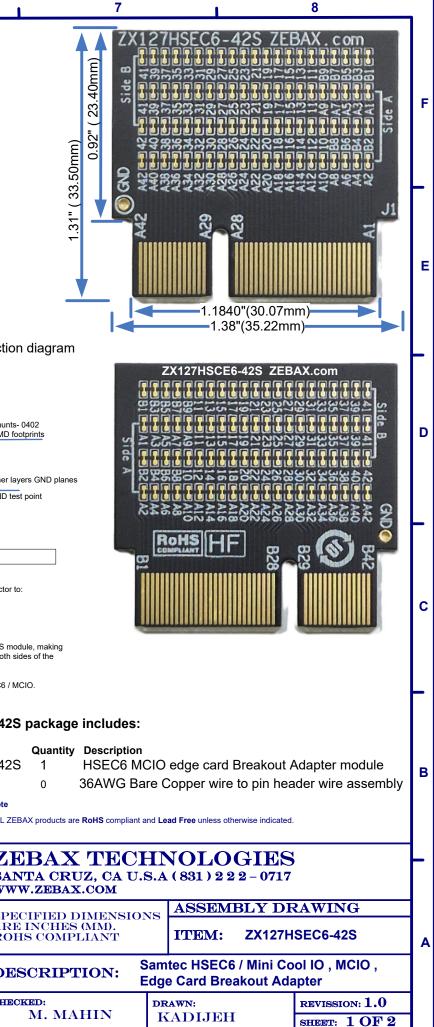
	1		1 2	2	3		4	5	6	
	Product Name	e: ZX127	HSEC6-42S S	amtec GENERA	FE HSEC6 / Mini Co	ool Edge IO	, MCIO, edge car	d breakout adapter -	- Page 1 OF 2	
F	F Product Description: ZX127HSEC6-42S is Samtec HSEC6 0.6mm pitch also referred as Mini Cool Edge IO , MCIO / SFF-TA-1002 , edge card breakout adapter. ZX127HSEC6-42S is designed for real-time electrical test & measurements, signal integrity , characterization, manufacturing loopback test applications.									
			-		•••			ge card 0.6mm pitch conn for purpose of test & meas		
 Provides access to all Samtec HSEC6 / MCIO signals via onboard Shunts. The Shunts are accessible on both sides of PCB for easy probe access. The shunts are standard 0402 SMD footprint package size. Listed number adjacent to each Shunt is in reference to the Samtec HSEC6 / MCIO connector pin numbers All traces are impedance controlled. 								cess.		
E	5- Four, 6- Acces 7- Ease 8- Reas	4, layers PC ssible GND t of interface sign any sign	CB design, inner la test point, The test with single channe nal by cutting the s	yers are GND planes point is connected to and differential sco shunts' inner connect	o inner GND planes. pe probes.					
-	9- Probi	ng wires ZX	00BC2PH1 or simi	lar is recommended.	ZX00BC2PH1				ZX127HSEC-42S simplified cros	s section
		npedance: 5		s°C			ZX127HSEC-42S s	implified circuit diagram		
D		ard Connecto Mates wi Pitch: 0.	or: ith: Samtec HSEC 60mm pin to pin p	C6 / MCIO 0.60mm pi itch	tch connector		4		Shunts- 0402 SMD footprints	Shunts- 0 SMD foot
_	Shunt: ZX00BC	Plating: Package	ss: 1.6mm (0.062 10µ" (0.25µm) :: Standard 0402 \$ WG Bare copper v	SMD package				2 2 SMD P ackage	Samtec HSEC6 Plug Mini Cool IO Plug Host orboard HSEC6 connector / Mini Copi IO, MCIO HOST PCB	GND test
с	Application:	Manufactu	ring test measurer	nent & re-use, bringu	ıp, testing , debugging		Samtec HSEC6 Plug Mini Cool IO Plug	J1 J	Note: Ground layers, Please note – The GND test point i 1- Top/Bottom GND fill 2- The inner layers ground planes	s connector to:
	Mates with :	Industry st Amphenol	andard Mini Cool G97, GH01 series	Edge IO , MCIO , SF ACES Electronics,		002, GEN-Z 1C	Mirli Cool I Hi	ard HSEC6 connector / O, MoIO OST PCB	Shunts & signal routing 1- Shunts are standard 0402 SMD package size 2- Shunts are available on both sides of ZX127H ALL HSEC / MCIO connector's signals are accessi	ISEC-42S modu
-			1202041 ME1005		5610201091 ME100561 5610205081 ME100561		Note: 1- Shunts are standard 04 2- Shunts are available on both si making ALL Samtec connector sig		module. # HSEC6 / MCIO signals path to Shunts and to/fro	m HSEC6 / MCI
	Industry Stan	dard∙⊦		nnectors have been	adopted by industry sta	ndards such as			ZX127HSI	
в	SEE-TA 1002 SEE-TA-1016 PCI Expres			6, PCI Express Gen 3	been adopted by industry standards such as: Gen 3.0, 4.0, 5.0, 6.0, OCP DC-MHS (HSIO recommended) nce. PCIe , NVMe , SAS ,SFP(+) ,SFP 28			Compliance: ISO2001 certified RoHs - Lead Free EU RoHS2 UL E111594 docume	ed ZX127HS ree ZX00BC2	
	Access: For signal meas							ELV- Vehicle Directiv European Union Dire Halogen Free per IEC	re (Directive 2000/EC) ctive (203/11/EC) C-61249-2.21 : 2003	Note ALL ZEBA
	1- Recommendation: Use 36AWG solid copper wire with pin header,ZX00BC2PH1 or similar RoHs Directive 2011 WEEE Directive (20 For signal relocation: Certificate of Complia							ZE SAN WWW		
	1- Cut the inner connecting trace within any Shunt and reassign to new location. Certificate of Complicing Certificate of Complicing Certificate of Complicing Search							ance for Asbestos ance for Ozone Depleting Substances, ODS VHC	SPEC ARE ROHS	
Α	Notice									
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		_										
ſ	Product Name: ZX127HSEC6-42S Samtec GENERATE HSEC6 / Mini Cool Edge IO , MCIO, card breakout adapter – Page 2 of 2											
F	Signal Access & re-route: Re-routing any signal on ZX127HSEC6-42S is implemented by cutting inner-connecting Shunt's trace and redirect to the new signal or test equipment.											
	Ground : ZX127HSEC6-42S is 4 layers PCB design where the inner layers are Ground layers. They are connected to the GND test point as well as top & bottom GND fills. For improved signal integrity, please connect the GND test point to system GND reference point. See Cross Section diagram for details.											
	Typical Application: ZX127HSEC6-42S is designed for purpose of test and debugging at full connector's bandwidth. It provides new approach in usage of breakout adapters by :											
E	 1- Utilizing single or differential scope probe. 2-Enabling design changes, by re-assignment of any signal by means of cut and solder, where any signal may be cut and assigned to new location by jumper wires. 	1										
	Scope Probe wire Installation: 1- It is recommended to keep the probe wire length at 0.5" (1.2cm) long.											
 2- Zebax provided ZX00BC2PH1, (36AWG Bare Copper wire to pin header wire assembly) is an ideal probing wire solution where the header fits into any single ended or differential probe. 												
D	3- In order to avoid ground loop problems, please use the shortest Ground probe wire interfacing to the nearest GND reference point. ZX127HSEC6-42S provides GND test point to be utilized as GND reference interface with host.	ſ										
	SFF-TA-1002 2C (2 rows x 42 pins/row) 84 pins standard- Below are listed signals and Ground pins assignments for the SFF-TA-1002 standard, please refer to the standard for formal signals map naming. This table denotes "SIG" or "GND" PIN geometry locations. The Grounds are not bussed together in the connector or the ZX127HSEC-42S breakout adapter. The listed GND signals are routed similar to the SIG signals, they are all individually routed signals.											
	ZX127HSEC-42S Pin Geometry Pattern (2C) SFF-TA_1002 Standard											
с	Side A 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 Name GND SIG SIG GND SIG SIG GND SIG SIG GND SIG SIG GND SIG	0										
	HSEC6 / MCIO footprint: ZX127HSEC6-42S mates with industry standard footprint for SFF-TA-1002 1C (2rows x 42 pins per row) 84 pins connectors.											
-		F										
в		E										
	Note ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated.											
-	ZEBAX TECHNOLOGIES SANTA CRUZ, CA U.S.A (831) 2 2 2 - 0717 WWW.ZEBAX.COM	\mathbf{f}										
A	SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT HATCH ASSEMBLY DRAWING ITEM: ZX127HSEC6-42S											
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