

[N]	REVISE CONNECTER C1,C2 APPEARANCE	VICKY	6/16/09'
[M]	ADD CABLE JACKET COLOR COLUMN	AXL	10/13/08'
[L]	REVISE THE INCH LENGTH	VICKY	08/29/08'
[K]	ADD SA P/N 4027808, 185mm, GOLD 30u" CHANGE BACK 1006734 TO GOLD 15u"	AXL	8/8/08'
[J]	ADD SA P/N,Gold PLATING AND REVISE NOTES24	VICKY	07/31/08'
[I]	ADD 430MM LENGTH P/N TO THE TABLE A	VICKY	07/21/08'
[H]	REVISE THE OVERMOLDING	VICKY	07/11/08'
[G]	ADD NOTES 24	VICKY	07/01/08'
[F]	ADD NOTES17.18.19.20.21.22.23	VICKY	06/09/08'
[E]	ADD 185mm P/N	Betty	02/15/08'
[D]	CORRECT TABLE A	Betty	06/14/07'
[C]	MODIFY TABLE A	Betty	01/04/07'
[B]	ADD LABEL	Betty	12/07/06'
[A]	ISSUED	Betty	12/07/06'
REV	ECN NO.	NAME	DATE

[C] [D] TABLE A

PART NUMBER	LENGTH	SA PART NUMBER	GOLD PLATING ON CONTACT	CABLE JACKET COLOR
SATA-10569-01	254 ± 5mm (10")	1005112	Gold 15u"	BLUE
SATA-10569-02	305 ± 10mm (12")		Gold 15u"	BLUE
SATA-10569-03	330 ± 10 mm (13")		Gold 15u"	BLUE
SATA-10569-04	406± 15mm (16")	1005243	Gold 15u"	BLUE
[E] SATA-10569-05	185± 10mm (7.3") [L]	1006734	Gold 15u"	[K] BLUE
[I] SATA-10569-06	430± 15mm (17")		Gold 15u"	BLUE
[K] SATA-10569-07	185± 10mm (7.3") [L]	4027808	Gold 30u"	BLACK

TOLERANCE	
LINEAR	ANGLES
X.±	X°.±
.XX±0.15	.XX°±
.XXX±0.05	.XXX°±

**GENESIS TECHNOLOGY, INC**  
 A Genesis Electro-Mechanical Company  
 3 Ind Area Guan Lan  
 Shenzhen China 518110

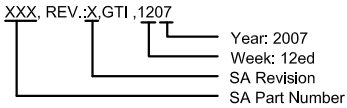
TITLE: SATA CABLE ASSY STRAIGHT			
PART NO. SATA-10569-XX		DWG NO. SC-10569-XX	
UNITS	SCALE	SHEET	REV
MM	NONE	1 OF 2	N

APPD:	MAT'L:
CHKD:	FINISH:
DRWN:	Q'TY:

**NOTES:**

1. Dielectric Strength: 500V AC.
2. Insulation Resistance: 1000 Megaohms min.
3. Conductor Resistance: 500 milliohms max.
4. Mated Connector Impedance: 100 ohms ±15%.
5. Cable Absolute Impedance: 100 ohms±10%.
6. Cable Pair Matching: ± 5ohms.
7. Common Mode Impedance: 25 to 40ohms.
8. Insertion Loss: 6dB max.
9. Crosstalk: NEXT = -26dB
10. Rise Time: 85 psec max.
11. Intrapair Skew: 10 psec max.
12. ISI: 50psec max.
13. Raw cable to be spectra-Strip 150-3099-990 or Scientific Atlanta approved equal.  
UL2725 (26AWG\*2C+DRAIN WIRE/28AWG\* 2C)\*2F,Jacket Color: See Table A.
14. Compliant to SATA 2.6 Spec.
15. RoHS Compliant.

**[B]** 16. Label Shall Print SA Part Number, Revision, Vendor ID and Date Code.



**[E]** 17. Connector and cable assembly requirements and test procedures

- a.Mated
- b.Temperature: 15° to 35° C
- c.Relative Humidity: 20% to 80%
- d.Atmospheric Pressure: 650 mm to 800 mm of Hg

**[E]** 18. Housing and contact electrical parameters and requirements

- a.Insulation resistance: 1000 Mohm minimum
- b.Dielectric withstanding voltage:The dielectric shall withstand 500 VAC for 1 minute at sea level.
- c.Low level contact resistance (LLCR):Initially 30 m ohm maximum.Resistance increase 15 mohm maximum after stress.
- d.Contact current rating(Power segment):1.5 A per pin minimum.  
The temperature rise above ambient shall not exceed 30 ° C at any point in the connector when contact positions are powered. The ambient condition is still air at 25 ° C.

**[E]** 19. Mechanical requirements

- a.Cable pull-out: No physical damage. Cable shall meet all connector and cable mechanical requirements before and after the completion of the test
- b.Cable flexing: No physical damage. No discontinuity over 1 us during flexing.
- c.Insertion forceCabled signal connector: 45 N Max.
- d.Removal force Cabled signal connector (with latching):Apply a static 25N unmating test load, No damage and no disconnect through 50 mating cycles.
- e.Durability:No physical damage, Meet requirements of additional tests as specified in the test sequence in Note 22.

**[E]** 20.Environmental requirements

- a.Physical shock: No discontinuities of 1 us or longer duration. No physical damage.
- b.Random vibration: No discontinuities of 1 us longer duration.
- c.Humidity: See 1)
- d.Temperature life:See 1).
- e.Thermal shock:See 1).
- f.Mixed Flowing Gas:See 1).
- 1). Shall meet EIA 364-18 Visual Examination requirements, show no physical damage, and shall meet requirements of additional tests as specified in the test sequence in Note 22.
- 2). Shock and vibration test fixture is to be determined by each user with connector vendors.

- [E]** 21.Requires UL94V-0 rating  
a.Flammability:Material certification or certificate of compliance required with each lot to satisfy the Underwriters Laboratories follow-up service requirements.
- [E]** 22.Test group sequences

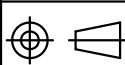
Test or examination	Test group				
	A	B	C	D	E
Examination of the connector(s)	1, 5	1, 9	1, 8	1, 8	1, 7
Low-Level Contact Resistance (LLCR)	2, 4	3, 7	2, 4, 6		4, 6
Insulation resistance				2, 6	
Dielectric withstanding voltage				3, 7	
Current rating			7		
Insertion force		2			
Removal force		8			
Durability	3	4 <sup>(1)</sup>			2 <sup>(1)</sup>
Physical shock		6			
Vibration		5			
Humidity				5	
Temperature life			3		
Reseating (manually unplug/plug three times)			5		5
Mixed Flowing Gas					3
Thermal shock				4	

NOTE  
1. Preconditioning, 20 cycles for the 50-durability cycle requirement, 50 cycles for the 500-durability cycle requirement. The insertion and removal cycle is at the maximum rate of 200 cycles per hour.

**[E]** 23.Electrical Requirements

Parameter	Requirement
Mated Connector Differential Impedance	100 Ohms ±15%
Cable Absolute Differential Impedance	100 Ohms ±10%
Cable Pair Matching Impedance	±5 Ohms
Common Mode Impedance	25 - 40 Ohms
Maximum Insertion Loss of Cable (10-4500 MHz)	6 dB
Maximum Crosstalk, single lane: NEXT (10-4500 MHz)	26 dB loss
Maximum Crosstalk, Multilane: CXT (10 - 4500 MHz)	30 dB loss
Maximum Rise Time	85 ps (20-80%)
Maximum Inter-Symbol Interference	50 ps
Maximum Intra-Pair	10 ps

- [J]** **[G]** 24.Material :  
Connector: PBT+GF30%, UL94V-0.  
Terminal: Phosphor Bronze with Gold over 50u"min Nickel.(See Table A)

TOLERANCE			TITLE:					
LINEAR	ANGLES		SATA CABLE ASSY STRAIGHT					
X.±	X°.±	3 Ind Area Guan Lan Shenzhen China 518110 A Genesis Electro-Mechanical Company	PART NO.		SATA-10569-XX			
.X±0.25	.X°±		DWG NO.		SC-10569-XX			
.XX±0.15	.XX°±	APPD:	MAT'L:		UNITS	SCALE	SHEET	REV
.XXX±0.05	.XXX°±	CHKD:	FINISH:		MM	NONE	2 OF 2	N
		DRWN:	Q'TY:					

	SEE PAGE1		
REV	ECN NO.	NAME	DATE