



# Total Technologies, Ltd.







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Category						TN
(i.e., Sour	ink Rene	Cable)				
Product N	s):		H H	Cabl	ile to	

Date of Issue:	September 29, 2004	
Authorized Testing Center:	Silicon Image	
	Michael Schumacher	

Attachment: Test Results Form

Notes:

1. This confirmation of test results does not guarantee the quality or functionality of your product, its compliance with the 1 Specification (including the High-Definition Multimedia Interfaces), or its interoperability with other HDMI products.

2. The information in the attached report is subject to the NIAD between your company and the Authorized Testing Genter.



# **New Product Introduction**















Your Reliable Manufacturing Partner Since 1982



# **Total Technologies, Ltd®**

# "Cost Down and Quality Up "" "

Total Technologies, Ltd. (TTL) is a highly diversified manufacturer of various OEM/ODM cable assemblies, adapters and multimedia interfaces, since 1982. With over 1,200 employees for Global support, 15 worldwide patents, and 60,000 designs, TTL is a promising and outstanding cable supplier. TTL currently produces 7 million assorted cable assemblies and adapters per month. TTL provides high quality products to many of the largest multimedia, telecommunication and computer related peripherals, components and accessories manufacturers in the world. TTL's ECO-Friendly products are designed to meet worldwide requirements such as RoHS, EPA, and California Proposition 65. TTL has been certified by Sony as their first Green Partner with a perfect rating in the cable and connector category. TTL offers excellent R&D design and engineering services, quick lead-time, plus sales and customer support at its offices in Irvine, California, Taiwan, China, Japan, and Germany.



**U.S.A Headquarter** 



**Taiwan Office** 



### Why Choose TTL's HDMI Cable?

#### ■ **HDMI** ATC Compliance testing approved.

On **October 6, 2004,** Total Technologies, Ltd. is proud to announce that its HDMI to HDMI (5 meter) cable has passed Silicon Image's ATC compliance testing. TTL's HDMI licensed product successfully completed ATC compliance testing in accordance with the HDMI Compliance Test Specification, revision 1.1.

# ■ Benefits of the Patented RF-BLOK<sup>™</sup> shielded design:

- 1. ECO design.
- 2. Reduced interference from one piece seamless EMI/RFI shielded metal can.
- No requirement of ferrite cores as signal loss and degradation are greatly reduced giving enhanced signal sharpness. Without the ferrite cores the cables is less stressed and more flexible.
- 4. No soldering requirements as interconnect design needs no 360° soldering eliminating the possibility of human error and/or cracking of the solder that causes grounding intermittence and the use of the most hazardous waste material - soldering flux.
- 5. Increased insulation resistance up to 45%.
- 6. No inner mold-avoids the potential damage that can be occurred during injection molding process.
- 7. Smaller overall dimensions which allows more room behind the host or peripheral.



Adopter Information	
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Product Information	
Category:	
Product Name(s):	HDMI-HDMI Cable, Male to Male, 5 meter
	HDMI-MM-SM
Confirmation of Authorized Test Date of Jone:	September 29, 2004
	Silicon Image
	Michael Schumacher



Patent US 6,287,148 B1 US 6,776,665 B2 US D483, 373 S Other worldwide patents pending

# TTL *Hi-PQ*<sup>™</sup> (Hi-PQ Series-High Definition Picture Quality) HDMI Cables



(Hi-PQ Series-High Definition Picture Quality)

In 2004, Total Technologies, Ltd. announced its HDMI and HDMI to DVI product line. Listed below are the reasons why your company should choose TTL's HDMI/DVI cables and adapters.

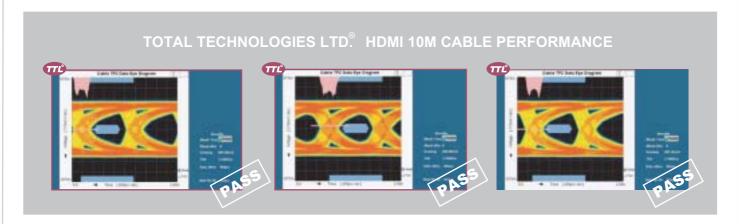
HDTV Resolutions Supported: 1080i and 1080p! TTL's Hi-PQ<sup>™</sup> series cables incorporate a High Quality Wire Construction that maintain high definition resolutions up to 1080p plus multi-channel digital audio, including HDCP (High Bandwidth Digital Content Protection) compliance.

**Computer Resolutions Supported:** TTL's **Hi-PQ**<sup>™</sup> series cables are good for resolutions up to 1920x1200. Long length (10 meter, 15 meter and 20 meter) cables are good for resolutions up to 1280x1024.



Hi-PQ<sup>™</sup> (Hi-PQ Series-High Definition Picture Quality)

In 2005, TTL's HDMI 10 meter  $\mathcal{H}i$ - $\mathcal{P}Q^{\infty}$  cables "PASSED" Silicon Image's Data Eye Pattern compliance testing. The objective of the below listed data is to ensure the differential data has adequate "eye-opening" to enable effective recovery at the sink (Display) device after transmission. Comparison to MASK determines "PASS" or fail and analysis of data jitter provides useful information on "Signal Integrity"



# TTL's SSAC<sup>™</sup> (HDMI TYPE-A -DVI 19 PIN Super SLim And Compact Adapters) **HDMI Adapters**



(Super SLim And Compact Adapters)

A complete line of Super Slim and Compact (SSAC<sup>TM</sup> HDMI-DVI adapters, DVI-HD15 adapters, and M1-D adapters are available to meet requirements of legacy systems. This patented one piece, seamless, all metal solder-less design, results in superior shielding, low resistance, and extremely high reliability. TTL's current HDMI connecting design is under patent pending, not only in the U.S., but worldwide.





# Homi MULTIMEDIA INTERFACE \*\*GALLER PRINTION M



#### HDMI TYPE-A 19 PIN Super SLim And Compact Cables

# **ATC** compliance TESTING Approved!







HDMI-MM-L

VIHD-MM-L

PDHD-MM-L (M1-HDMI)



VIHD-FM250



VIHD-SLAC-L

HDMI-918MM-L

HDMI long distance Hi-PQ <sup>™</sup>CABLES

# The Toughest HDMI Cables On The RF-BLOK ™

# **BENEFITS:**

- 1. Patented RF-BLOK<sup>™</sup> (Patent No.:US 6,278,148 B1) design provides the best EMI/EMC results and product reliability, avoiding potential high pressure / temperature damage during the injection molding process.
- 2. Super Slim And Compact (SSAC™) connector design provides an interface that is easy fitting, at the same time preventing interference with other connectors.
- 3. Super light weight design saves overall freight costs.
- 4. Luxurious all metal design provides a very ROBUST solution.
- 5. (ℋi-伊O<sup>™</sup> Series) Hi-Definition Picture Quality cables are available in various lengths up to 25 meters.
- 6. Environment protection (ECO-Friendly) products are manufactured to meet Worldwide requirements.



































# **Adapters**

#### HDMI TYPE-A -DVI 19 PIN Super SLim And Compact Adapters



HDMI-F / DVI-M PIN.:HFDM-A



HDMI-M/DVI-F P/N.:HMDF-S



HDMI-M/DVI-F (OFF-SET)



HDMI-F / DVI-F PIN.:HFDF-C



Available in a variety of finishes!



HDMI-F / HDMI-F PIN.:HFHF-CA

ATC compliance testing Approved cables!

### **BENEFITS:**

- 1. Super Slim And Compact (SSAC™) size adapters provide an interface that is easy fitting, at the same time preventing interference with other connectors. HMDF adapters available in right or left angle designs.
- **2.** The SSAC<sup>™</sup> series adapters provide the least amount of tension to board mounted HDMI (female) connectors.
- **3.** Patented RF-BLOK™ (Patent No.: US 6,278,148 B1) design provides the best EMI/ EMC results and product reliability, avoiding potential high pressure / temperature damage during the injection molding process.
- 4. Luxurious all metal design provides a very ROBUST solution.
- 5. Super light weight design saves overall freight costs.
- 6. Environment protection (ECO-Friendly) products are manufactured to meet Worldwide requirements.



































# Digital All-In-One cables

# DVI/IEEE1394/USB All-in-One Multi-Functional Cable



- 1. All-In-One zipcord design solution for digital devices transmissions.
- 2 Easy-handling zipcord design provides excellent "cable management".
- 3. Available as an extension cable, or a standard male to male cable.
- 4. Available for various connections such as HDMI, DVI, M1-D/A IEEE1394-a,1394-b, i-Link, USB AM-AF, AM-BM.
- 5. (Hi-PQ <sup>™</sup> Series) Hi-Definition Picture Quality cables are available in various lengths up to 20 meters.
- 6. Patented RF-BLOK<sup>™</sup>(Patent No.:US 6,278,148 B1) shielding design provides the best EMI/EMC results and product reliability.
- 7. HDMI ATC, DVI DDWG, IEEE1394, USB2.0 high speed certified product.





Zipcord Design



Male-Female Extension cable



Male-Male Standard cable

# DVI with Coaxial Audio Zipcord



- 1. High quality low attenuation Mini Coaxial cable design provides crystal clear audio for AV applications that require long distance transmissions.
- 2. (Hi-PQ $^{\text{TM}}$  Series) Hi-Definition Picture Quality cables are available in lengths up to 20 meters.
- 3. Patented RF-BLOK<sup>™</sup>(Patent No.:US 6,278,148 B1) shielded design provides the best EMI/EMC results and product reliability.
- 4. Easy-handling zipcord design provides excellent "cable management".
- 5. Available in Gold plated RCA and DVI connectors
- 6. Various colors are now available.

























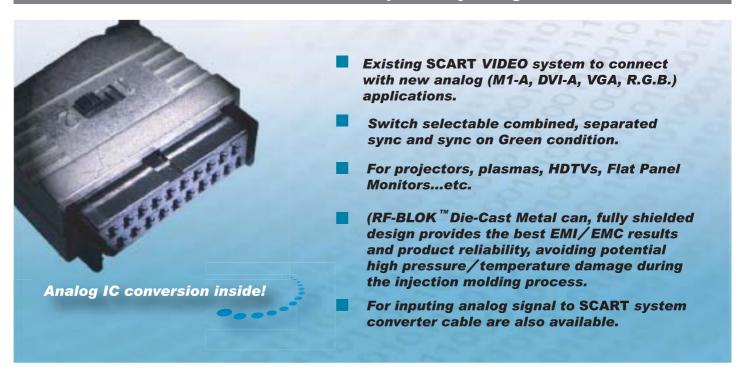






# **SCART To ANALOG Converter Cable**

#### Smart Solution for SCART Composite Sync Signal Conversion.



### SCART to M1/DVI/VGA/RGB Converter Cable & Adapter



P/N: SCDVA-FM-0.2M Scart → DVI



P/N: SCRGB-FM-0.2M Scart → RGB



Scart -Composite+Svideo with in / out switch



P/N: SCVGA-FM-0.2M Scart →VGA



P/N: SCM1-FM-0.2M Scart → M1



Scart - Composite Scart- R.G.B.































# **Serial ATA- I and -II Cables**

#### Serial ATA 7-I and -II PIN AND 15 PIN CABLES



TTĽ

SATA-I Latch Type

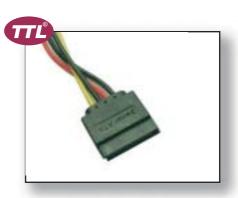


SATA-I 90 Degree





SATA Power with latch



SATA Power without latch





SATA Power with latch



# Serial ATA -- Enabling the Future

Serial ATA is an evolutionary replacement for the Parallel ATA physical storage interface. Serial ATA is scalable and will allow future enhancements to the computing platform.

- Scalability—Serial ATA is a point-to-point connection and allows multiple ports to be aggregated into a single controller that is typically located either on the motherboard or as an add-in, RAID card
- Performance Serial ATA technology will deliver 1.5 Gbps (150 MB/sec) of performance to each drive within a disk drive array.
- Cabling Serial ATA specifies a thin, point-to-point connection which allows for easy cable routing within a system. This avoids master/slave, "daisy-chaining", and termination issues. Also, better airflow can be realized compared to systems with wider ribbon cables.































#### HDMI (SLAC™ and *ℋi-ዊ*Q<sup>™</sup> ) Series



HDMI-A male to HDMI-A male cable, Gold plated connector

1M P/N: HDMI-MM-G-1M (3.3FT) Length: **2M** Length: P/N: HDMI-MM-G-2M (6FT) Length: P/N: HDMI-MM-G-3M (10FT)



(Hi-PQ™Series)

HDMI-A male to HDMI-A male cable, with " Hi-PO " wire and gold plated connector

P/N: HDMI-HIPQ-A-4.5M (15FT) Length: 4.5M Length: 7.5M P/N: HDMI-HIPQ-A-7.5M (25FT) Length: 10M P/N: HDMI-HIPQ-A-10M (33FT) Length: 15M P/N: HDMI-HIPQ-A-15M (50FT) Length: 20M P/N: HDMI-HIPQ-A-20M (66FT) Length: 25M P/N: HDMI-HIPQ-A-25M (75FT)



DVI-D female to HDMI-A male adaptor with gold plated connector and RF-BLOK<sup>™</sup> metal can with color plating, straight.

**Color Plating: Silver white** P/N: HMDF-S Color Plating: Black color P/N: HMDF-S-B Color Plating: Golden color P/N: HMDF-S-G



DVI-D female to HDMI-A male adaptor with gold plated connectorand RF-BLOK<sup>™</sup> metal can with color plating. Right angle.

Color Plating: Silver white P/N: HMDF-OC Color Plating: Black color P/N: HMDF-OC-B Color Plating: Golden color P/N: HMDF-OC-G



DVI-D female to HDMI-A male adaptor with gold plated connector and RF-BLOK<sup>™</sup> metal can with color plating. Left angle.

Color Plating: Silver white P/N: HMDF-OSL P/N: HMDF-OSL-B Color Plating: Black color Color Plating: Golden color P/N: HMDF-OSL-G

































#### HDMI (SLAC™ and *Hi-P*Q<sup>™</sup> ) Series



DVI-D male to HDMI-A female adaptor with gold plated connector and RF-BLOK <sup>™</sup> metal can with color plating.

**Color Plating: Silver white** P/N: HFDM-A Color Plating: Black color P/N: HFDM-A-B Color Plating: Golden color P/N: HFDM-A-G



DVI-D female to HDMI-A female adaptor with gold plated connector and RF-BLOK<sup>™</sup> metal can with color plating.

Color Plating: Silver white P/N: HFDF-C Color Plating: Black color P/N: HFDF-C-B Color Plating: Golden color P/N: HFDF-C-G



**HDMI** female to female fully shielded adaptor black color case.

P/N: HFHF-CA



HDMI-A male to DVI-D connecting cable gold plated connector

Length: 1M P/N: VIHD-MM-G-1M (3.3FT) Length: **2M** P/N: VIHD-MM-G-2M (6FT) Length: 3M P/N: VIHD-MM-G-3M (10FT)



HDMI-A male to DVI-D male with "SLAC™" wire

Length: 5M P/N: VIHD-SLAC-5M (16.5FT) Length: 10M P/N: VIHD-SLAC-10M (33FT) Length: 15M P/N: VIHD-SLAC-15M (50FT) 20M Length: P/N: VIHD-SLAC-20M (66FT)

<sup>\*\*</sup>Any custom design and different length are available upon request.





























#### **DVI-DDWG APPROVED CABLES AND ADAPTERS**



#### DVI-I single link male to male with SLAC<sup>™</sup> wire

**3M** P/N: DVI-SLAC-3M (10FT) Length: Length: 4.5M P/N: DVI-SLAC-4.5M (15FT) Length: 7.5M P/N: DVI-SLAC-7.5M (25FT) Length: P/N: DVI-SLAC-10M (33FT) 10M



#### DVI-I single link male to female with SLAC<sup>™</sup> wire

Length: **3M** P/N: DVI-FSLC-3M (10FT) Length: 4.5M P/N: DVI-FSLC-4.5M (15FT) P/N: DVI-FSLC-7.5M (25FT) Length: 7.5M



#### DVI-D male to DVI-D male single-link with SLAC<sup>™</sup> wire

Length: **3M** P/N: DVIMM-SLAC-3M Length: 5M P/N: DVIMM-SLAC-5M Length: 10M P/N: DVIMM-SLAC-10M Length: 15M P/N: DVIMM-SLAC-15M



# DVI-D male to DVI-D female single-link with SLAC<sup>™</sup> wire

P/N: DVIMF-SLAC-3M Length: **3M** Length: 5M P/N: DVIMF-SLAC-5M P/N: DVIMF-SLAC-7.5M Length: 7.5M



DVI-I female to DVI-D male converter and port saver with nickel plated connector shell and RF-BLOK <sup>™</sup> metal can

P/N: DA-MF-01































#### **DVI-DDWG APPROVED CABLES AND ADAPTERS**



DVI-I single link F/F gender changer with nickel- plated RF-BLOK<sup>™</sup> metal can

P/N: DVIF/F-A



DVI-I female to DVI-D male 90  $^{\circ}\text{L-shape}$  converter with nickel plated RF-BLOK  $^{\text{TM}}$  metal can

P/N: DVIM/F-90A



DVI male to VGA female super slim and compact (SSAC ™) with nickel plated RF-BLOK<sup>™</sup> metal can

P/N: DAS-AM/VGAF



DVI-D SINGLE-LINK INFINIDRIVE<sup>™</sup> SIGNAL REPEATER, Non-powered.

P/N: DSD-11B



DVI-D single-link male-male in-wall installation "SLAC ™ " cable set total length:15M (14.5M+0.5M) (NEC CL2 rated wire also available upon request)

P/N: DVIM-IWD-15M

<sup>\*\*</sup>Any custom design and different length are available upon request.































#### **DVI-DDWG APPROVED CABLES AND ADAPTERS**



DVI-I singal link male to VGA female and DVI-D single link female twin-view adapter cable

P/N: DVITV-MF-0.2M



DVI-D single link SLAC<sup>™</sup>, 1394, USB. All-In-One cable.

Male to Female.

Length: 1.8M P/N: 3IN1M-F-1.8M (6FT) Length: **3M** P/N: 3IN1M-F-3M (10FT) 4.5M Length: P/N: 3IN1M-F-4.5M (15FT)

DVI-D single link SLAC<sup>™</sup>, 1394, USB. All-In-One cable.

Male to Male.

Length: 1.8M P/N: 3IN1M-M-1.8M (6FT) 3M Length: P/N: 3IN1M-M-3M (10FT) 4.5M Length: P/N: 3IN1M-M-4.5M (15FT)



DVI-D single link SLAC ™ with audio L/R coaxial RCA M-M zipcord

Length: **2M** P/N: DVILR-MM-2M Length: **3M** P/N: DVILR-MM-3M 5M Length: P/N: DVILR-MM-5M 10M Length: P/N: DVILR-MM-10M Length: 15M P/N: DVILR-MM-15M



DVI-D single link SLAC<sup>™</sup> with audio L/R RCA coaxial to 3.5mm stereo M-M zipcord

Length: 1.8M P/N: D35A-MM-1.8M (6FT) Length: 3M P/N: D35A-MM-3M (10FT) Length: 4.5M P/N: D35A-MM-4.5M (15FT) P/N: D35A-MM-7.5M (25FT) Length: 7.5M Length: 10M P/N: D35A-MM-10M (30FT) Length: 15M P/N: D35A-MM-15M (50FT)



DVI-A male to RGB female adapter cable, Length: 0.3M

P/N: DVRF-GB-0.3M (1FT)































#### **DVI-DDWG APPROVED CABLES AND ADAPTERS**



DVI-A male to Y/Pb/Pr converter cable with coaxial wire gold plated connectors

Length: 1.8M P/N: DVR-G-1.8M (6FT) Length: 3M P/N: DVR-G-3M (10FT) Length: 4.5M P/N: DVR-G-4.5M (15FT) Length: 7.5M P/N: DVR-G-7.5M (25FT) Length: 15M P/N: DVR-G-15M (50FT) Length: 30M P/N: DVR-G-30M (100FT)



**DVI-I Dual link Female dual-port wall mount adapter** 

P/N: DVT-F

#### PROJECTOR P&D(M1) CABLES AND ADAPTORS



P&D(M1-D) male to HDMI-A male cable.

Length: 1M P/N: PDHD-MM-1M Length: **2M** P/N: PDHD-MM-2M Length: P/N: PDHD-MM-3M



P&D(M1-D) male to HDMI-A male cable with "SLAC <sup>™</sup> " wire

Length: 5M P/N: PDHD-SLAC-5M P/N: PDHD-SLAC-10M Length: 10M Length: 15M P/N: PDHD-SLAC-15M



EVC(M1-A) male to VGA female and USB-B female projector adaptor cable

P/N: EVUB-MF-0.2M

<sup>\*\*</sup>Any custom design and different length are available upon request.



































#### PROJECTOR P&D(M1) CABLES AND ADAPTORS



P&D(M1-D) male to DVI-D female and USB-B female projector adaptor cable

P/N: EDUB-MF-0.2M



P&D(M1-D)male to DVI-D male and USB-A male projector cable.

**2M** P/N: EDUB-MM-2M Length: Length: **3M** P/N: EDUB-MM-3M Length: 5M P/N: EDUB-MM-5M



EVC(M1-A)male to VGA male and USB-A male projector cable.

**2M** P/N: EVUB-MM-2M Length: Length: 3M P/N: EVUB-MM-2M 5M P/N: EVUB-MM-2M Length:



EVC(M1-A) male to RGB female plus USB-B female adaptor cable

P/N: EVRU-A-0.3M (1FT)



EVC(M1-A) male to 3RCA(red, green, blue) male cable.

1.8M P/N: EVC-RGB-1.8M (6FT) Length: Length: **3M** P/N: EVC-RGB-3M (10FT) Length: 4.5M P/N: EVC-RGB-4.5M (15FT) Length: 7.5M P/N: EVC-RGB-7.5M (25FT) 15M Length: P/N: EVC-RGB-15M (50FT)

<sup>\*\*</sup>Any custom design and different length are available upon request.































#### PROJECTOR P&D(M1) CABLES AND ADAPTORS



VGA male to Y/Pb/Pr RCA male converter cable with coaxial wire gold plated connectors

Length: 1.8M P/N: UXR-G-1.8M (6FT) Length: 3M P/N: UXR-G-3M (10FT) Length: 4.5M P/N: UXR-G-4.5M (15FT) 7.5M P/N: UXR-G-7.5M (25FT) Length: Length: 15M P/N: UXR-G-15M (50FT) Length: 30M P/N: UXR-G-30M (100FT)



VGA male to RGB (Y/Pb/Pr) female adapter cable,

Length: 0.3M

P/N: VGRF-G-0.3M (1FT)

#### **OTHER NEW PRODUCTS**



Scart female to EVC (M1-A) male analog adaptor cable WITH SYNC SELECTION (SEPARATE or COMBINE) (Scart input / output switch selecting model also available upon request)

P/N: SCM1-FM-0.2M



Scart female to EVC (DVI-A) male analog adaptor cable WITH SYNC SELECTION (SEPARATE or COMBINE) (Scart input / output switch selecting model also available upon request)

P/N: SCDVA-FM-0.2M































#### **OTHER NEW PRODUCTS**



Scart female to RGB(Y/Pb/Pr) male analog adaptor cable WITH SYNC SELECTION (SEPARATE or COMBINE) (Scart input / output switch selecting model also available upon request)

P/N: SCRGB-FM-0.2M



Scart female to VGA male analog adaptor cable WITH SYNC SELECTION (SEPARATE or COMBINE) (Scart input / output switch selecting model also available upon request)

P/N: SCVGA-FM-0.2M



IEEE1394 4-4 male 180° to male 90° "Locking" cable. Length:2M

P/N: 1394-4M4M-2M



IEEE1394 4-4 male to female right angle 90° "locking" extension cable. Length:2M

P/N: 1394-4M4RF-2M



IEEE-1394b 9pin-9pin male-male Bilingual cable.

1.5M P/N: 1394-B99-1.5M Length: Length: **2M** P/N: 1394-B99-2M **3M** P/N: 1394-B99-35M Length: Length: 4.5M P/N: 1394-B99-4.5M































#### **OTHER NEW PRODUCTS**



#### IEEE-1394b 9pin-4pin male-male Bilingual cable

1.5M P/N: 1394-B94-1.5M Length: Length: 2M P/N: 1394-B94-2M Length: 3M P/N: 1394-B94-3M Length: 4.5M P/N: 1394-B94-4.5M



#### IEEE-1394b 9pin-6pin male-male Bilingual cable

1.5M P/N: 1394-B96-1.5M Length: Length: 2M P/N: 1394-B96-2M Length: 3M P/N: 1394-B96-3M Length: 4.5M P/N: 1394-B96-4.5M



IEEE-1394a 6pin female to 4 pin male with power jack adaptor cable, length=0.12M

P/N: 1394-64PW-0.12

#### **Fine Pitch wire harness**







#### CAT5/ 5e/ 6 New Type Snuggle Boots





































# Total Technologies, Ltd.

Your Reliable Manufacturing Partner since 1982.

Lead-free works for the environment, We know how to make it works in cables.

Since 2002, Total Technologies, Ltd.
has been certified by SONY®
as a Green Partner.



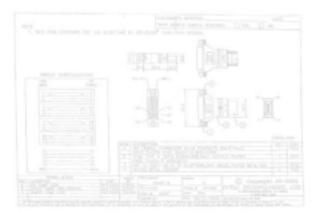






SONY Green Partner

















Total Technologies, LTD.





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