



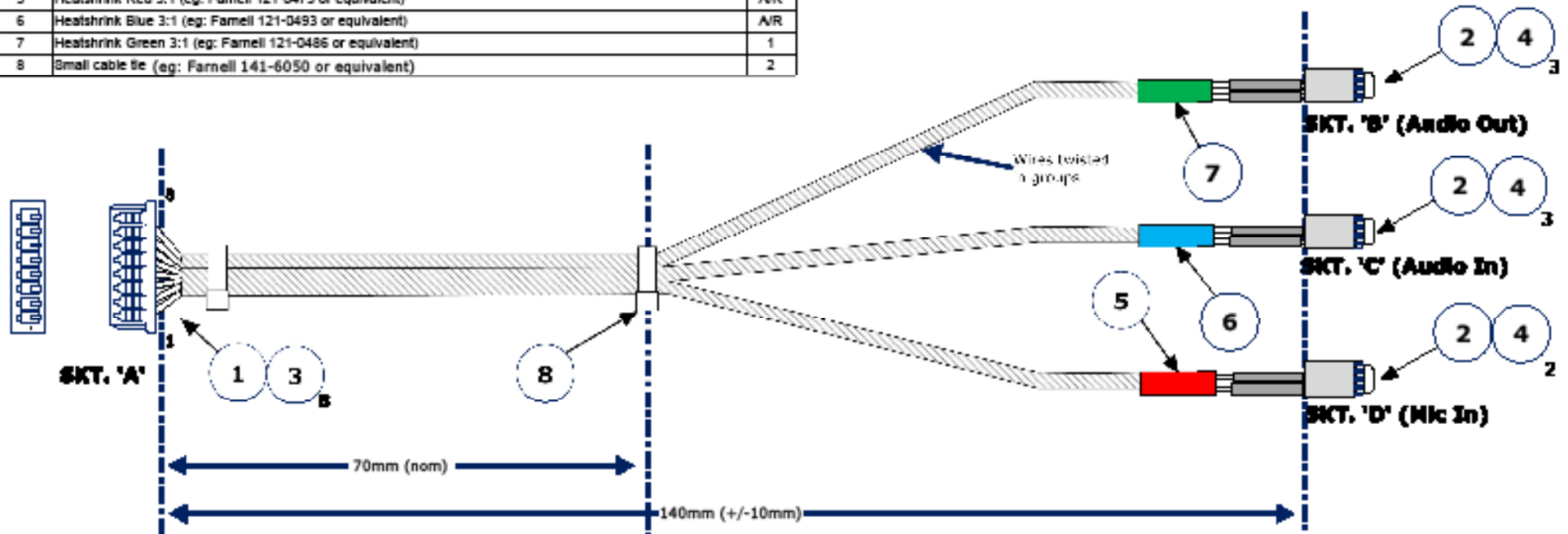
RE1 Single Board Computer Cable Drawing Manual v1.0

Note: cable drawings are representative, actual cables supplied may vary from those shown.

Audio Cable Part Number 1371-1421

| Item: | Description: | Qty: |
|-------|---|------|
| 1 | Molex 51021-0800 8-way receptacle housing (eg: Farnell 101-2262) | 1 |
| 2 | Lumberg KLB 4 3.5mm/3-pole bulkhead jack or equivalent (eg: Farnell 120-0144) | 3 |
| 3 | Pre-crimped 150mm/28AWG Wire (Molex 1.25mm socket to free end) (eg: half of 300mm/28AWG Wire Molex 6660013 skt to skt - Farnell 112-5274 or equivalent) | 8 |
| 4 | Heatshrink 3:1 (eg: Farnell 119-1010 or equivalent) | A/R |
| 5 | Heatshrink Red 3:1 (eg: Farnell 121-0473 or equivalent) | A/R |
| 6 | Heatshrink Blue 3:1 (eg: Farnell 121-0493 or equivalent) | A/R |
| 7 | Heatshrink Green 3:1 (eg: Farnell 121-0486 or equivalent) | 1 |
| 8 | Small cable tie (eg: Farnell 141-6050 or equivalent) | 2 |

[NB: Heatshrink item '4' to provide initial strain-relief between wire and solder-tag. Heatshrink items '5' to '7' to colour-code sockets and to lock wires together in groups]



TIP -1 0 1 2 - RING
3 - SLEEVE

JACK SOCKET PIN NUMBERING (VIEWED FROM REAR)

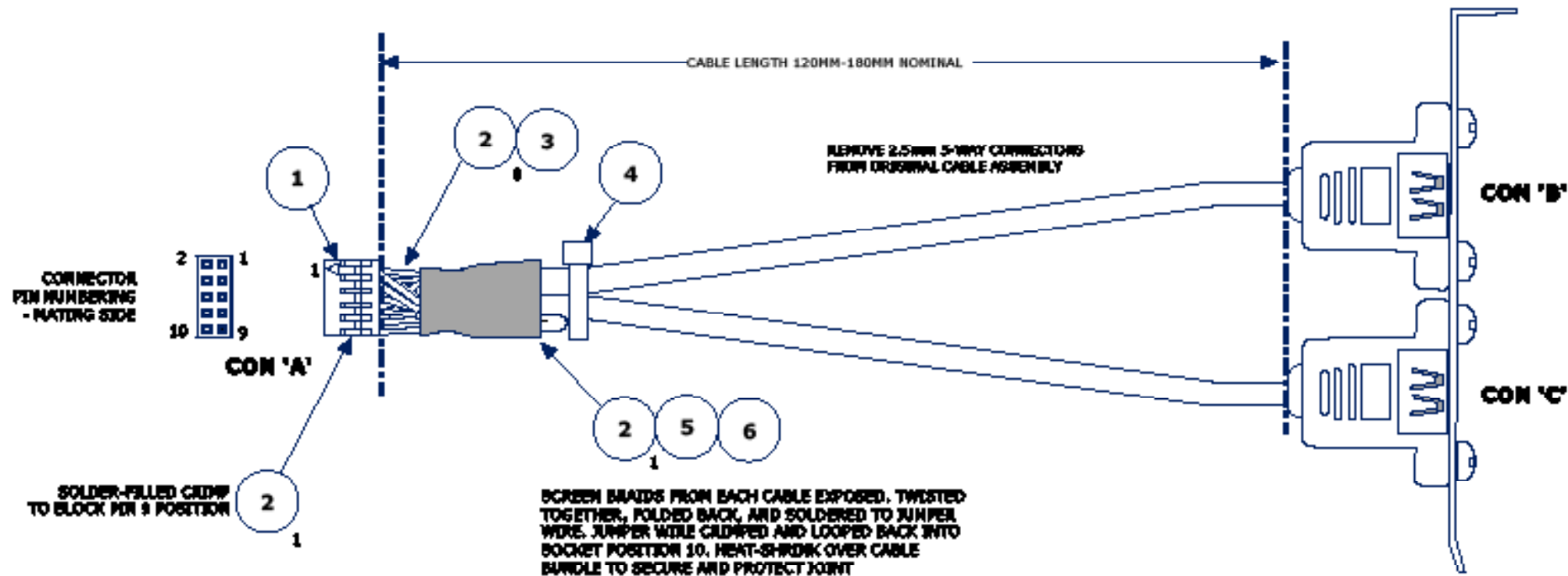
| SKT. 'A' PIN: | WIRE | DESCRIPTION | WIRE TO: |
|---------------|------|-------------|----------------|
| 1 | GRP1 | OUT R | SKT. 'B' PIN 2 |
| 2 | GRP1 | OUT L | SKT. 'B' PIN 1 |
| 3 | GRP1 | GND | SKT. 'B' PIN 3 |
| 4 | GRP2 | IN L | SKT. 'C' PIN 1 |
| 5 | GRP2 | IN R | SKT. 'C' PIN 2 |
| 6 | GRP2 | GND | SKT. 'C' PIN 3 |
| 7 | GRP3 | GND | SKT. 'D' PIN 3 |
| 8 | GRP3 | MIC | SKT. 'D' PIN 1 |

| | | | | | |
|----------|------|-------------|-----|-----|-----|
| 03/11/08 | 01 | ECN2008,067 | JDB | RT | - |
| Date | Iss. | Mod. Ref. | DWN | APP | CHK |

| | | | |
|---------------|---|----------|----------------------|
| Material: N/A | Scale: N/A | To: N/A | |
| Finish: N/A | Used on: RISC ENGINE [1371-1421] | | |
| | Drawn: JOB | 28/10/08 | TITLE: |
| | Checked: RT | 03/11/08 | CABLE ASBY |
| | Issue: 01 | 03/11/08 | RISC AUDIO |
| A3/A3 | Blue Chip Technology, Chorley Oak, Tattenhall, Chester, Cheshire CH6 9EX (UK) | | DRG. No: 2008-0016-G |

Cable for USB 3 & 4 Part Number 1371-1424

| Item: | Description: | Qty: |
|-------|---|------|
| 1 | Con Crimp Housing 2.0mm 2x5 (eg: Molex 051110-1050 or equivalent) | 1 |
| 2 | Crimp terminals for 2.0mm housing (eg: Molex 50394-8100 or equivalent) | 10 |
| 3 | Dual USB cable assembly (eg: Cables Direct USB2-120) | 1 |
| 4 | Small cable tie (eg: Farnell 141-6050 or equivalent) | 1 |
| 5 | Jumper Wire 24AWG Black | A/R |
| 6 | Heat-shrink sleeving ~9.5mm orig. diameter (eg: Farnell 496-7185 or equivalent) | A/R |



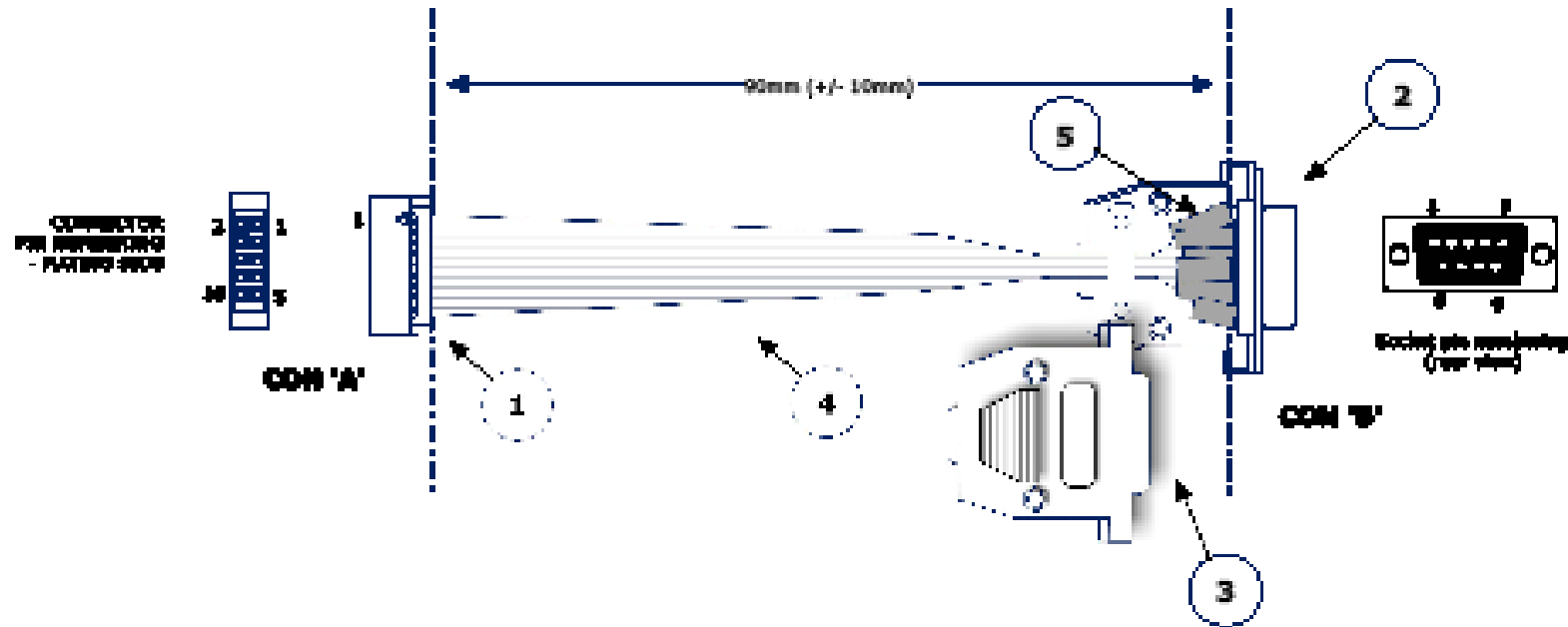
| CON. 'A' PIN: | DESCRIPTION: | WIRE TO: | WIRE COLOUR: |
|---------------|--|--------------------------------|------------------|
| 1 | V+ | CONN'B' Cable | RED |
| 3 | USB1- | CONN'B' Cable | WHITE |
| 5 | USB1+ | CONN'B' Cable | GREEN |
| 7 | GND | CONN'B' Cable | BLACK |
| 9 | INSERT SOLDER-FILLED CRIMP TO BLOCK HOLE | | |
| 2 | V+ | CONN'C' Cable | RED |
| 4 | USB2- | CONN'C' Cable | WHITE |
| 6 | USB2+ | CONN'C' Cable | GREEN |
| 8 | GND | CONN'C' Cable | BLACK |
| 10 | | CONN'B' Cable CONN'C' Cable | SCREEN SCREEN |

| 06/01/09 | 02 | ECN2009,001 | JOB | TH | - |
|----------|------|-------------|-----|-----|-----|
| 03/11/08 | 01 | ECN2008,067 | JOB | RT | - |
| Date | Iss. | Mod. Ref. | DWN | APP | CHK |

| | | | | | |
|---------------|---|----------------------------------|-----|----------|----------------------|
| Material: N/A | | Scale: | N/A | To: | N/A |
| Finish: N/A | | Used on: RISC ENGINE [1371-1424] | | | |
| | | Drawn: | JOB | 29/10/08 | TITLE: |
| | | Checked: | RT | 03/11/08 | CABLE ASBY |
| | | Issue: | 01 | 03/11/08 | RISC DUAL USB |
| A3/A3 | Blue Chip Technology, Chowley Oak, Tattenhall, Chester, Cheshire CH6 9EX (UK) | | | | DRG. No: 2008-0019-G |


RS232 Cable Part Number 1371-1425

| Item: | Description: | Qty: |
|-------|--|------|
| 1 | 2mm 3x5 DCD header | 1 |
| 2 | 9-way D-type, Male, Solder bucket (eg: Farnell 100-4621 or equivalent) | 1 |
| 3 | 9-way D-Type shell (eg: Farnell 293-7907 or equivalent) | 1 |
| 4 | 10-conductor, 1mm pitch, ribbon cable (eg: Farnell 143-5567 or equivalent) | A/R |
| 5 | 3:1 Heatshrink (eg: Farnell 119-1010 or equivalent) | A/R |



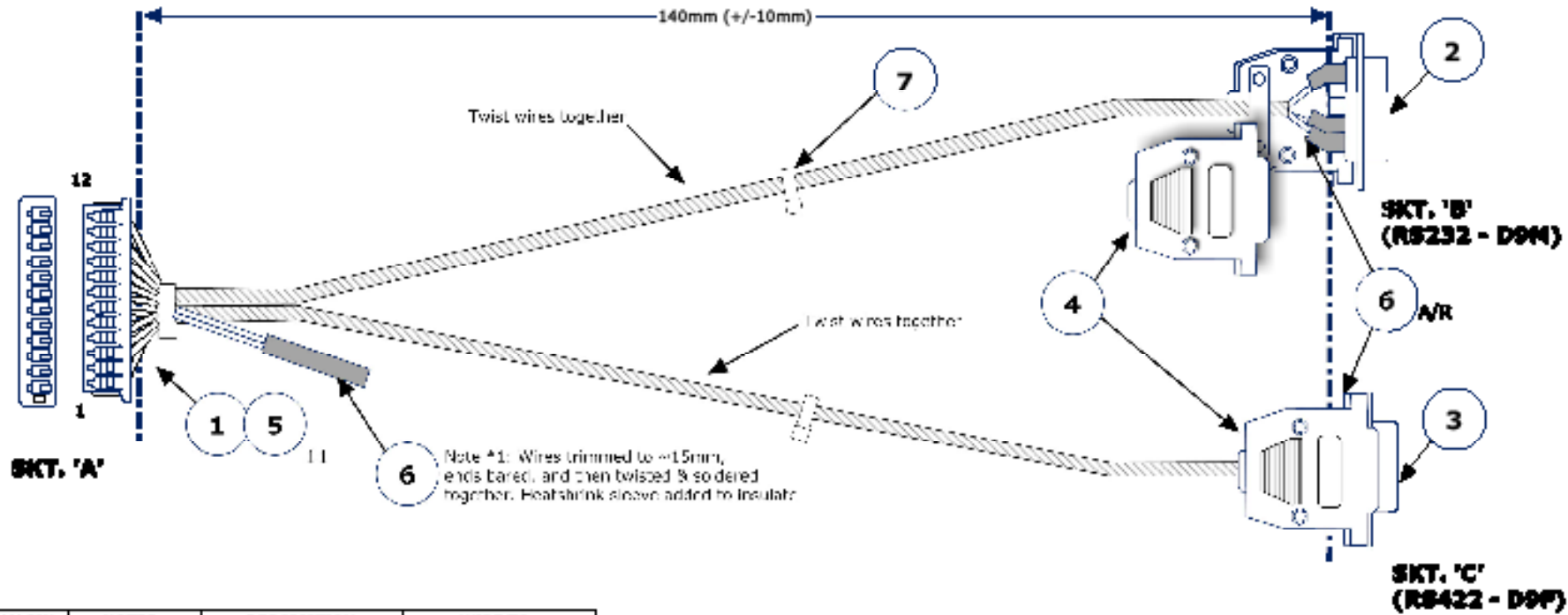
| CON. 'A' PIN: | DESCRIPTION | CON. 'B' PIN: |
|---------------|-----------------|---------------|
| 1 | DCD | 1 |
| 2 | RX | 2 |
| 3 | TX | 3 |
| 4 | DTR | 4 |
| 5 | GND | 5 |
| 6 | DSR | 6 |
| 7 | RTS | 7 |
| 8 | CTS | 8 |
| 9 | RI | 9 |
| 10 | [NO CONNECTION] | |

| Date | Iss. | Mod. Ref. | DWN | APP | CHK |
|----------|------|-------------|-----|-----|-----|
| 16/10/98 | 01 | ECN2008,066 | JDB | RT | - |
| 03/11/98 | 01 | ECN2008,067 | JDB | RT | - |

| | | |
|---|--|---------------------------------|
| Material: N/A | Scale: N/A | Tol: N/A |
| Finish: N/A | Used on: RISC ENGINE (1371-1425) | |
|  | Drawn: JDB 22/10/98 | TITLE: CABLE ASSY RISC RS232 |
| | Checked: RT 03/11/98 | |
| | Issue: 01 03/11/98 | |
| AJAG | Blue Chip Technology, Crawley, UK, Talented, Creative, Cheaper - Call 01243 821100 | DRG. No: 2008-0028-G |

RS232/422/485 Cable Part Number 1371-1426

| Item: | Description: | Qty: |
|-------|--|------|
| 1 | Molex 51021-1200 12-way receptacle housing (eg: Farnell 121-1003) | 1 |
| 2 | 9-way D-type, Male, Solder bucket (eg: Farnell 108-4672 or equivalent) | 1 |
| 3 | 9-way D-Type, Female, Solder bucket (eg: Farnell 108-4678 or equivalent) | 1 |
| 4 | 9-way D-Type shell (eg: Farnell 393-7987 or equivalent) | 2 |
| 5 | Pre-crimped 150mm/28AWG Wire (Molex 1.25 wire-board connector - eg: half of 300mm/28AWG wire Molex 6660013 skt-skt/Farnell 112-5274 or equivalent) | 11 |
| 6 | 3:1 Heatshrink (eg: Farnell 119-1010 or equivalent) | 5 |
| 7 | Small cable tie (eg: Farnell 141-6050 or equivalent) | 3 |

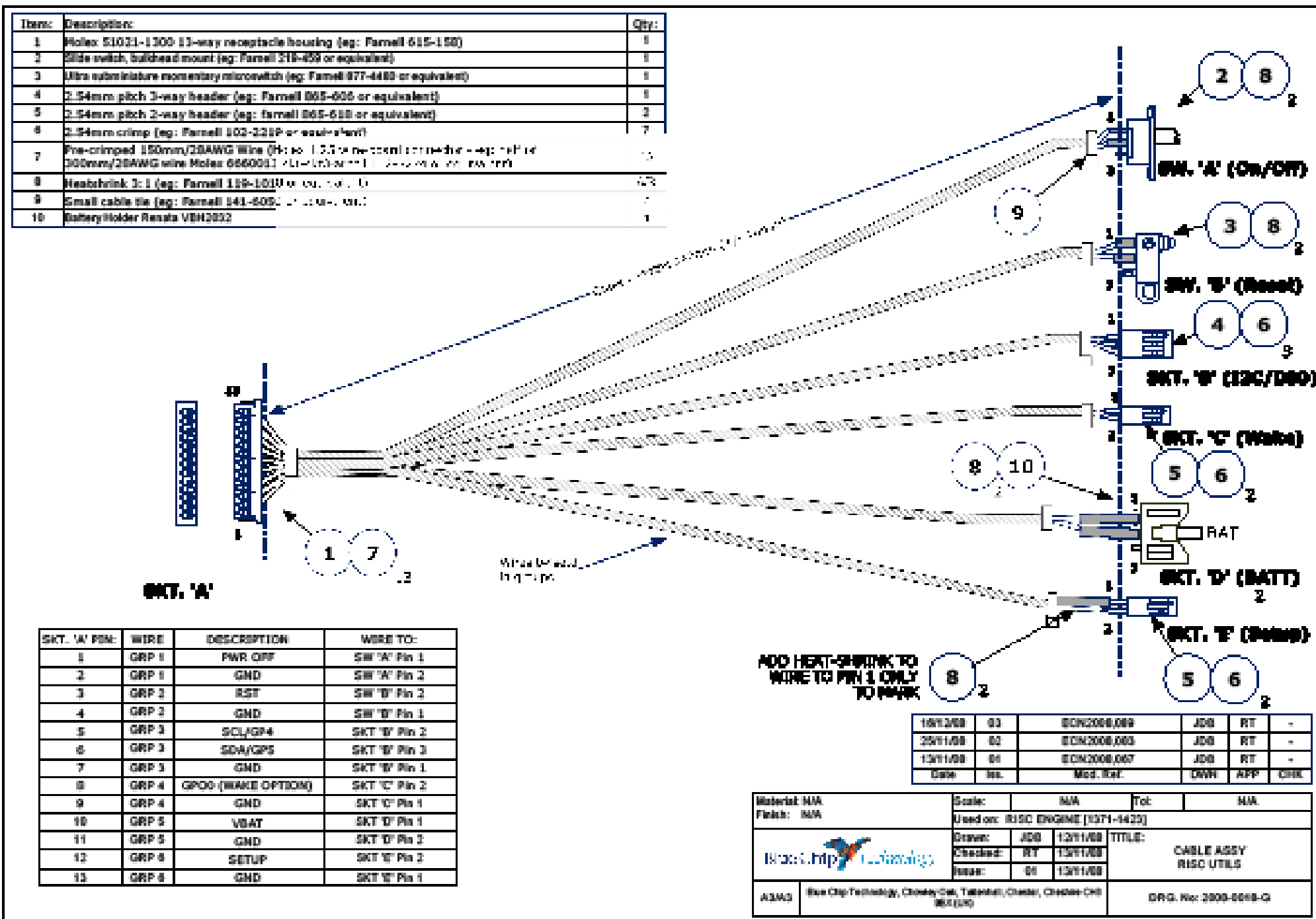


| SKT. 'A' PIN: | NOTES: | DESCRIPTION | WIRE TO: |
|---------------|--------------------------|-------------|-------------------------------|
| 1 | | GND | SKT 'B' Pin 5 |
| 2 | | RX1 | SKT 'B' Pin 2 |
| 3 | | TX1 | SKT 'B' Pin 3 |
| 4 | | +5V | - |
| 5 | Twist together as a pair | Pull-Down | SKT 'C' Pin 9 |
| 6 | | Pull-Up | SKT 'C' Pin 8 |
| 7 | | 120R Term | Looped together (see Note *1) |
| 8 | | RX2N Loop | |
| 9 | Twist together as a pair | RX2N | SKT 'C' Pin 2 |
| 10 | | RX2P | SKT 'C' Pin 1 |
| 11 | Twist together as a pair | TX2N | SKT 'C' Pin 4 |
| 12 | | TX2P | SKT 'C' Pin 3 |

| Date | Iss. | Mod. Ref. | DWN | APP | CHK |
|----------|------|-------------|-----|-----|-----|
| 15/12/08 | 02 | ECN2008,089 | JOB | RT | - |
| 03/11/08 | 01 | ECN2008,067 | JOB | RT | - |

| | | | |
|----------------------------------|---|----------------------|----------------------|
| Material: N/A Finish: N/A | | Scale: N/A | Tol: N/A |
| Used on: RISC ENGINE [1371-1426] | | | |
| | | Drawn: JOB 28/10/08 | TITLE: CABLE ASBY |
| | | Checked: RT 03/11/08 | RISC RS232/422/485 |
| | | Issue: 01 03/11/08 | |
| A3/A3 | Blue Chip Technology, Chowley Oak, Tattenhall, Chester, Cheshire CH6 9EX (UK) | | DRG. No: 2008-0021-G |

Utility Cable Part Number 1371-1423



| Item: | Description: | Qty: |
|-------|--|------|
| 1 | Molex 51021-1300 13-way receptacle housing (eg: Farnell 615-150) | 1 |
| 2 | Slide switch, bulkhead mount (eg: Farnell 218-459 or equivalent) | 1 |
| 3 | Ultra subminiature momentary microswitch (eg: Farnell 877-4480 or equivalent) | 1 |
| 4 | 2.54mm pitch 3-way header (eg: Farnell 665-605 or equivalent) | 1 |
| 5 | 2.54mm pitch 2-way header (eg: Farnell 665-610 or equivalent) | 2 |
| 6 | 2.54mm crimp (eg: Farnell 802-328P or equivalent) | 7 |
| 7 | Pre-terminated 150mm/20AWG wire (Hole to 1.25mm required for header - eg: Molex 0000mm/20AWG wire Molex 6660011 Ultraflex with 1.25mm hole for wire) | 13 |
| 8 | Heatshrink 3:1 (eg: Farnell 159-101W or equivalent) | 2 |
| 9 | Small cable tie (eg: Farnell 141-605 or equivalent) | 1 |
| 10 | Battery Holder Resata VBH2032 | 1 |

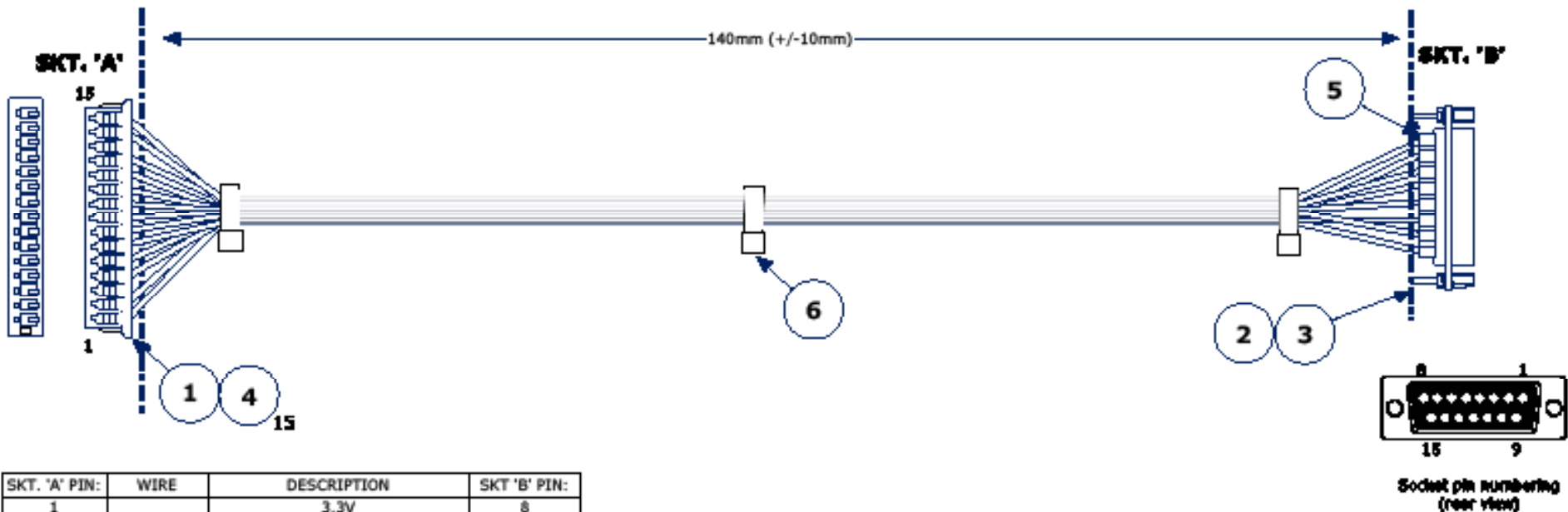
| SKT. 'A' PIN: | WIRE | DESCRIPTION | WIRE TO: |
|---------------|-------|--------------------|---------------|
| 1 | GRP 1 | PWR OFF | SW 'A' Pin 1 |
| 2 | GRP 1 | GND | SW 'A' Pin 2 |
| 3 | GRP 2 | RST | SW 'B' Pin 3 |
| 4 | GRP 2 | GND | SW 'B' Pin 1 |
| 5 | GRP 3 | SCL/GP4 | SKT 'B' Pin 2 |
| 6 | GRP 3 | SDA/GP5 | SKT 'B' Pin 3 |
| 7 | GRP 3 | GND | SKT 'B' Pin 1 |
| 8 | GRP 4 | GPOD (WAKE OPTION) | SKT 'C' Pin 2 |
| 9 | GRP 4 | GND | SKT 'C' Pin 1 |
| 10 | GRP 5 | VBAT | SKT 'D' Pin 1 |
| 11 | GRP 5 | GND | SKT 'D' Pin 3 |
| 12 | GRP 6 | SETUP | SKT 'E' Pin 2 |
| 13 | GRP 6 | GND | SKT 'E' Pin 1 |

| | | | | | |
|----------|------|-------------|-------|------|------|
| 18/12/08 | 03 | EDC2008.089 | JDB | RT | - |
| 20/11/08 | 02 | EDC2008.080 | JDB | RT | - |
| 13/11/08 | 01 | EDC2008.087 | JDB | RT | - |
| Date | Iss. | Mod. Ref. | Drawn | App. | CHK. |

| | | |
|---------------|--|----------------------|
| Material: N/A | Scale: N/A | Tol: N/A |
| Finish: N/A | Used on: RISC ENGINE (1371-1423) | |
| | Drawn: JDB 13/11/08 | TITLE: CABLE ASSY |
| | Checked: RT 13/11/08 | RISC UTILS |
| | Issue: 01 13/11/08 | |
| ASMG | Blue Chip Technology, Chantry Way, Telford, Shropshire, Cheshire CH6 1JH | DRG. No: 2008-0048-G |

Misc (I2S, GPIO, IRDA) Cable Part Number 1371-1422

| Item: | Description: | Qty: |
|-------|---|------|
| 1 | Molex 51021-1500 15-way receptacle housing (eg: Farnell 101-2242) | 1 |
| 2 | 15-way D-Type socket (solder bucket) (eg: Farnell 108-4679 or equivalent) | 1 |
| 3 | D-Type Extended Female Screwlock Kits (eg: Farnell 109-9011) | 1 |
| 4 | Pre-crimped 150mm/28AWG Wire (Molex 1.25 wire-board connector) - (eg: half of Farnell 112-5276 or equivalent) | 15 |
| 5 | 3:1 Heatshrink (eg: Farnell 119-1010 or equivalent) | A/R |
| 6 | Small cable ties (eg: Farnell 141-6050 or equivalent) | 3 |



| SKT. 'A' PIN: | WIRE | DESCRIPTION | SKT 'B' PIN: |
|---------------|------|--------------|--------------|
| 1 | | 3.3V | 8 |
| 2 | | GPO1 | 1 |
| 3 | | GPO2 | 9 |
| 4 | | GPO3 | 2 |
| 5 | | GPO6 | 10 |
| 6 | | GPO16 | 3 |
| 7 | | GPO17 | 11 |
| 8 | | GPO18 | 4 |
| 9 | | GPO29/I2SDIO | 12 |
| 10 | | GPO30/I1SCLK | 5 |
| 11 | | GPO31/I2SWRD | 13 |
| 12 | | GPO15/IRFIR | 6 |
| 13 | | GPO211/IRTX | 14 |
| 14 | | IRRX | 7 |
| 15 | | GND | 15 |

| | | | | | |
|----------|------|-------------|-----|-----|-----|
| 03/11/08 | 01 | ECN2008,067 | JDB | RT | - |
| Date | Iss. | Mod. Ref. | DWN | APP | CHK |

| | | |
|---------------|---|-----------------------------|
| Material: N/A | Scale: N/A | To: N/A |
| Finish: N/A | Used on: RISC ENGINE [1371-1422] | |
| | Drawn: JOB 28/10/08 | TITLE: CABLE ASBY RISC MISC |
| | Checked: RT 03/11/08 | |
| | Issue: 01 03/11/08 | |
| A3/A3 | Blue Chip Technology, Chowley Oak, Tattenhall, Chester, Cheshire CH6 9EX (UK) | DRG. No: 2008-0017-G |