

BOM of TIDA-00507 for Intel® Atom™ C2000 SoC for VCCP rail.

Date: Jan 12, 2015

Engineer: Narendra Kumar

| Item | Qty | Reference | Value         | Description                        | Size | Part Number        | Manufacturer | Notes | Populate |
|------|-----|-----------|---------------|------------------------------------|------|--------------------|--------------|-------|----------|
|      |     | C1        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | Yes      |
|      |     | C2        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | Yes      |
|      |     | C3        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | Yes      |
|      |     | C4        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | Yes      |
|      |     | C5        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | Yes      |
|      |     | C6        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | No       |
|      |     | C7        | 10uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 1206 | GRM31CR61E106KA12L | Murata       |       | No       |
|      |     | C8        | 22uF          | Capacitor, Ceramic, 25V, X7R, 20%  | 603  | GRM31CR61E106KA12L | Murata       |       | No       |
|      |     | C9        | 1uF           | Capacitor, Ceramic, 10V, X7R, 10%  | 402  | STD                | STD          |       | Yes      |
|      |     | C10       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C11       | 220uF         | Capacitor, 2.5VDC Max, 20%         | D2T  | 2R5TPL330MFU       | Sanyo        |       | No       |
|      |     | C13       | 560pF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | No       |
|      |     | C14       | 470uF/4.5mohm | Capacitor, 2.5VDC Max, 20%         | D2T  | 2R5TPL330MFU       | Sanyo        |       | Yes      |
|      |     | C16       | 10uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J106KE19L | Murata       |       | Yes      |
|      |     | C17       | 470uF/4.5mohm | Capacitor, 2.5VDC Max, 20%         | D2T  | 2R5TPL330MFU       | Sanyo        |       | Yes      |
|      |     | C19       | 10uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J106KE19L | Murata       |       | Yes      |
|      |     | C23       | 0.01uF        | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C24       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C25       | 10uF          | Capacitor, Ceramic, 10V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C26       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C27       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | No       |
|      |     | C29       | 10uF          | Capacitor, Ceramic, 10V, X7R, 10%  | 603  | STD                | STD          |       | No       |
|      |     | C31       | 560pF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C32       | 1nF           | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C33       | 0.33uF        | Capacitor, Ceramic, 10V, X7R, 10%  | 402  | STD                | STD          |       | Yes      |
|      |     | C34       | 1uF           | Capacitor, Ceramic, 10V, X7R, 10%  | 402  | STD                | STD          |       | Yes      |
|      |     | C35       | 560pF         | Capacitor, Ceramic, 10V, X7R, 10%  | 402  | STD                | STD          |       | Yes      |
|      |     | C36       | 1uF           | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C37       | 1500pF        | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C38       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C39       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C40       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C41       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C42       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C43       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C44       | 2.2 uF        | Capacitor, Ceramic, 10V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C45       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C46       | 0.65uF        | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | No       |
|      |     | C47       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C48       | 0.65uF        | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |
|      |     | C49       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C50       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C51       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C52       | 10nF          | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C54       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C55       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C56       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C57       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C58       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C59       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C60       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C61       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C62       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C63       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C64       | 1nF           | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | Yes      |
|      |     | C65       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C66       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C67       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C68       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C69       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C70       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C71       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C72       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C73       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C74       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C75       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C76       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C77       | 1nF           | Capacitor, Ceramic, 25V, X7R, 10%  | 402  | STD                | STD          |       | No       |
|      |     | C78       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C80       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | No       |
|      |     | C83       | 47uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J226ME39L | Murata       |       | Yes      |
|      |     | C85       | 220uF         | Capacitor, Aluminum, 2V, 6mOhm 10% | 7343 | EEFSXOD331XR       | Panasonic    |       | No       |
|      |     | C86       | 220uF         | Capacitor, Aluminum, 2V, 6mOhm 10% | 7343 | EEFSXOD331XR       | Panasonic    |       | No       |
|      |     | C87       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 603  | N/A                | Murata       |       | No       |
|      |     | C88       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 603  | N/A                | Murata       |       | No       |
|      |     | C89       | 10uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 805  | GRM21BR60J106KE19L | Murata       |       | Yes      |
|      |     | C90       | 22uF          | Capacitor, Ceramic, 6.3V, X5R, 10% | 603  | N/A                | Murata       |       | No       |
|      |     | C91       | 0.1uF         | Capacitor, Ceramic, 25V, X7R, 10%  | 603  | STD                | STD          |       | Yes      |

|  |      |                         |  |                    |                         |                 |     |
|--|------|-------------------------|--|--------------------|-------------------------|-----------------|-----|
|  | C92  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C93  | 0.01uF                  | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C94  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C95  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C96  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C97  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C98  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | GRM21BR60J106KE19L      | Murata          | No  |
|  | C99  | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | GRM21BR60J106KE19L      | Murata          | No  |
|  | C100 | 0.1uF                   | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C101 | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 805                | GRM21BR60J106KE19L      | Murata          | Yes |
|  | C102 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C103 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C104 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C105 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C106 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C107 | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C108 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C109 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C110 | 22uF                    | Capacitor, Ceramic, 10V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C111 | 22uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 603                | N/A                     | Murata          | No  |
|  | C112 | 10uF                    | Capacitor, Ceramic, 6.3V, X5R, 10%                         | 805                | GRM21BR60J106KE19L      | Murata          | Yes |
|  | C114 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C115 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C116 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C117 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C118 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C119 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C121 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C122 | 22uF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | No  |
|  | C136 | 1nF                     | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C137 | 0.1uF                   | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C138 | 1uF                     | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C139 | 0.01uF                  | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C142 | 10pF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C145 | 10pF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C161 | 0.1uF                   | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | C162 | 10pF                    | Capacitor, Ceramic, 25V, X7R, 10%                          | 603                | STD                     | STD             | Yes |
|  | D20  | GREEN                   | Diode, LED, Green Clear, 20mcd                             | 0.079 X 0.049      | LTST-C170GKT            | Lite On         | Yes |
|  | D21  | RED                     | Diode, LED, Red Clear, 20mcd                               | 0.079 X 0.049      | LTST-C170CKT            | Lite On         | Yes |
|  | D23  | GREEN                   | Diode, LED, Green Clear, 20mcd                             | 0.079 X 0.049      | LTST-C170GKT            | Lite On         | Yes |
|  | J1   | 33457                   | LUG, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated | 0.375 x1.00 inch   | 33457                   | AMP             | Yes |
|  | J7   | PEC06SAAN               | Header, Male 6-pin, 100mil spacing,                        | 0.100 inch x 6     | PEC06SAAN               | Sullins         | Yes |
|  | J8   | PEC08DAAN               | Header, Male 2x8 pin, 100mil spacing                       | 0.100 inch X2X8    | PEC08DAAN               | Sullins         | Yes |
|  | J9   | PTC36SAAN               | Header, Male 2-pin, 100mil spacing, (36-pin strip)         | 0.100 inch x 2     | PEC02SAAN               | Sullins         | Yes |
|  | J10  | PTC36SAAN               | Header, Male 2-pin, 100mil spacing, (36-pin strip)         | 0.100 inch x 2     | PEC02SAAN               | Sullins         | Yes |
|  | J11  | PTC36SAAN               | Header, Male 2-pin, 100mil spacing, (36-pin strip)         | 0.100 inch x 2     | PEC02SAAN               | Sullins         | Yes |
|  | J13  | 39299042                | Header, ATX 2x2 Vertical with Mounting Pegs                | 4.2x15 mm          | 39299042                | Phoenix Contact | Yes |
|  | J14  | 8952-0-05-80-00-00-03-0 | Header, Single pin   | 0.125 x 1 inch     | 8952-0-05-80-00-00-03-0 | Mill-Max        | Yes |
|  | J15  | 8952-0-05-80-00-00-03-0 | Header, Single pin   | 0.125 x 1 inch     | 8952-0-05-80-00-00-03-0 | Mill-Max        | Yes |
|  | J18  | 33457                   | LUG, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated | 0.375 x1.00 inch   | 33457                   | AMP             | Yes |
|  | J19  | 442060007               | Header, ATX 2x12 Vertical with Mounting Pegs               | 9.6x60 mm          | 442060007               | Phoenix Contact | Yes |
|  | J20  | ED1514                  | Terminal Block, 2-pin, 6-A, 3.5mm                          | 0.27 x 0.25 inch   | ED555/2DS               | OST             | Yes |
|  | J21  |                         |  |                    |                         |                 |     |
|  | J22  | PEC08DAAN               | Header, Male 2x8 pin, 100mil spacing                       | 0.100 inch X2X8    | PEC08DAAN               | Sullins         | Yes |
|  | J23  |                         |  |                    |                         |                 |     |
|  | J24  | 33457                   | LUG, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated | 0.375 x1.00 inch   | 33457                   | AMP             | Yes |
|  | J25  | 8952-0-05-80-00-00-03-0 | Header, Single pin   | 0.125 x 1 inch     | 8952-0-05-80-00-00-03-0 | Mill-Max        | Yes |
|  | J26  | 8952-0-05-80-00-00-03-0 | Header, Single pin   | 0.125 x 1 inch     | 8952-0-05-80-00-00-03-0 | Mill-Max        | Yes |
|  | J30  | 33457                   | LUG, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated | 0.375 x1.00 inch   | 33457                   | AMP             | Yes |
|  | J31  | 33457                   | LUG, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated | 0.375 x1.00 inch   | 33457                   | AMP             | Yes |
|  | J45  | PTC36SAAN               | Header, Male 2-pin, 100mil spacing, (36-pin strip)         | 0.100 inch x 2     | PEC02SAAN               | Sullins         | Yes |
|  | J46  | PTC36SAAN               | Header, Male 2-pin, 100mil spacing, (36-pin strip)         | 0.100 inch x 2     | PEC02SAAN               | Sullins         | Yes |
|  | J50  | 8952-0-05-80-00-00-03-0 | Header, Single pin   | 0.125 x 1 inch     | 8952-0-05-80-00-00-03-0 | Mill-Max        | Yes |
|  | L1   | 0.23uH/0.29mohm         | Inductor, Power choke                                      | 0.453 x 0.394 inch | FDUE1040D-R 36M         | Toko            | No  |
|  | L1A  | 0.23uH/0.29mohm         | Inductor, Power choke SMT                                  | 0.303 x 0.276 inch | ETQP4LP15AFM            | Toko            | Yes |
|  | L2   | 0.23uH/0.29mohm         | Inductor, Power choke                                      | 0.453 x 0.394 inch | FDUE1040D-R 36M         | Toko            | No  |
|  | L2A  | 0.23uH/0.29mohm         | Inductor, Power choke SMT                                  | 0.303 x 0.276 inch | ETQP4LP15AFM            | Toko            | No  |
|  | Q1   | CSD97376CQ4M            | IC, SynchroNous Buck NexFETPower Stage                     | QFN                | CSD97376CQ4M            | TI              | Yes |
|  | Q2   | CSD97376CQ4M            | IC, SynchroNous Buck NexFETPower Stage                     | QFN                | CSD97376CQ4M            | TI              | No  |
|  | Q27  | BSS83P                  | MOSFET, Pch, -60V, -0.33A, 2 Ohm                           | SOT23              | BSS83P                  | Infineon        | Yes |
|  | Q30  | BSS123                  | MOSFET, Nch, 100V, 0.17A, 6 Ohm                            | SOT23              | BSS123                  | Fairchild       | Yes |
|  | Q32  | BSS123                  | MOSFET, Nch, 100V, 0.17A, 6 Ohm                            | SOT23              | BSS123                  | Fairchild       | Yes |
|  | R3   | 1                       | Resistor, Chip, 1/16W, 1%                                  | 603                | STD                     | STD             | Yes |
|  | R6   | 1                       | Resistor, Chip, 1/16W, 1%                                  | 603                | STD                     | STD             | No  |
|  | R8   | 9.37k                   | Resistor, Chip, 1/16W, 1%                                  | 603                | STD                     | STD             | Yes |
|  | R9   | Short                   | Resistor, Power 1W, 1%,                                    | 612                | WSK06121L000F           | Vishay          | Yes |
|  | R10  | Short                   | Resistor, Power 1W, 1%,                                    | 612                | WSK06121L000F           | Vishay          | No  |
|  | R11  | 1m                      | Resistor, Power 1W, 1%,                                    | 612                | WSK06121L000F           | Vishay          | Yes |
|  | R13  | 6.34k                   | Resistor, Chip, 1/16W, 1%                                  | 603                | STD                     | STD             | Yes |

|  |      |        |                           |     |     |        |     |
|--|------|--------|---------------------------|-----|-----|--------|-----|
|  | R14  | 413k   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R15  | 100k   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R16  | Open   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | No  |
|  | R18  | 34.67k | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R20  | 784k   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R22  | 0      | Resistor, Chip, 1/16W, 5% | 603 | STD | STD    | Yes |
|  | R23  | 1      | Resistor, Chip, 1/10W, 5% | 805 | STD | STD    | No  |
|  | R24  | 1      | Resistor, Chip, 1/10W, 5% | 805 | STD | STD    | Yes |
|  | R26  | 1      | Resistor, Chip, 1/10W, 5% | 805 | STD | STD    | No  |
|  | R28  | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R29  | 3.74k  | Resistor, Chip, 1/16W, 5% | 603 | STD | STD    | Yes |
|  | R36  | 39k    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R40  | 2.2    | Resistor, Chip, 1/16W, 5% | 603 | STD | STD    | Yes |
|  | R41  | 2.2    | Resistor, Chip, 1/16W, 5% | 603 | STD | STD    | No  |
|  | R45  | 150k   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | No  |
|  | R47  | 10k    | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R48  | 10k    | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R49  | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | No  |
|  | R50  | 30.1k  | Resistor, Chip, 1/16W, 5% | 603 | STD | Vishay | Yes |
|  | R51  | 30.1k  | Resistor, Chip, 1/16W, 5% | 603 | STD | Vishay | Yes |
|  | R55  | 1.46k  | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | No  |
|  | R56  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | No  |
|  | R57  | 0      | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | No  |
|  | R58  | 10     | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R59  | 0      | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R60  | 20.96k | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | No  |
|  | R61  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | No  |
|  | R62  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R63  | 1.63k  | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | No  |
|  | R64  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R65  | 10     | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R68  | 1.46k  | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R69  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R70  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | No  |
|  | R71  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | No  |
|  | R72  | 20.96k | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R73  | 1k     | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R74  | 1k     | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R75  | 1.63k  | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R76  | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R77  | 12k    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R89  | 1      | Resistor, Chip, 1/10W, 5% | 805 | STD | STD    | Yes |
|  | R90  | 1      | Resistor, Chip, 1/10W, 5% | 805 | STD | STD    | Yes |
|  | R106 | 15.0K  | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R108 | 51K    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R116 | 1k     | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R117 | 100    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R118 | 3.0k   | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R119 | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R120 | 330    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R123 | 1.0k   | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R124 | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R125 | 1      | Resistor, Chip, 1/16W, 5% | 603 | STD | Vishay | Yes |
|  | R126 | 1.0k   | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R128 | 180    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R130 | 180    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R132 | 2.0K   | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R134 | 180    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R137 | 0      | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R142 | 10k    | Resistor, Chip, 1/16W, 5% | 603 | STD | Vishay | Yes |
|  | R152 | 126k   | Resistor, Chip, 1/16W, 1% | 603 | Std | STD    | Yes |
|  | R156 | 10     | Resistor, Chip, 1/16W, 5% | 603 | STD | Vishay | Yes |
|  | R163 | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R171 | 24k    | Resistor, Chip, 1/16W, 1% | 603 | Std | STD    | Yes |
|  | R186 | 150k   | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R192 | 39k    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R199 | 39k    | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R219 | 10k    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R220 | 100.0K | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R228 | 3.0k   | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R229 | 1Meg   | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R234 | 100    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R235 | 56     | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | Yes |
|  | R236 | 100    | Resistor, Chip, 1/16W, 1% | 603 | STD | Vishay | No  |
|  | R237 | 0      | Resistor, Chip, 1/16W, 1% | 603 | STD | STD    | Yes |
|  | R238 | 100    | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | No  |
|  | R239 | 100    | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R240 | 56     | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R254 | 1Meg   | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R255 | 1Meg   | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R256 | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R257 | 0      | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |
|  | R269 | 1Meg   | Resistor, Chip, 1/16W, 1% | 402 | STD | STD    | Yes |

|  |       |              |  |                    |              |           |  |     |
|--|-------|--------------|--|--------------------|--------------|-----------|--|-----|
|  | R270  | 1Meg         | Resistor, Chip, 1/16W, 1%                                  | 402                | STD          | STD       |  | Yes |
|  | R271  | 1Meg         | Resistor, Chip, 1/16W, 1%                                  | 402                | STD          | STD       |  | Yes |
|  | R273  | 10k          | Resistor, Chip, 1/16W, 1%                                  | 402                | STD          | STD       |  | Yes |
|  | RT3   | 10k          | NTC Thermistor, 1%   | 603                | STD          | Murata    |  | Yes |
|  | RT4   | 10k          | NTC Thermistor, 1%   | 603                | STD          | Murata    |  | Yes |
|  | RT7   | 10k          | NTC Thermistor, 0603                                       | 603                | STD          | Murata    |  | Yes |
|  | S1    | EG1218A      | Switch, SPDT, Slide, PC-mount,                             | 0.457 x 0.157 inch | EG1218A      | E_Switch  |  | Yes |
|  | S2    | EG1218A      | Switch, SPDT, Slide, PC-mount,                             | 0.457 x 0.157 inch | EG1218A      | E_Switch  |  | Yes |
|  | SH1   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | SH2   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | SH3   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | SH4   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | SH7   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | SH8   | SHORT        | Short Jumper   |                    |              |           |  | Yes |
|  | TP1   | VBAT         | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP2   | VREF         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP3   | GND          | Test Point, Black, Thru Hole Color Keyed                   | 0.100 x 0.100 inch | 5001         | Keystone  |  | Yes |
|  | TP4   | V5A          | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP7   | SLEWA        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP8   | 5V_OVS       | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP9   | CSW2         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP10  | CSW1         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP11  | VCORE        | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP13  | GND          | Test Point, Black, Thru Hole Color Keyed                   | 0.100 x 0.100 inch | 5001         | Keystone  |  | Yes |
|  | TP14  | 5V_DRV       | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP15  | DROOP        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP17  | VCCIO        | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP19  | VIN          | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP20  | 1.2V         | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP22  | GND          | Test Point, Black, Thru Hole Color Keyed                   | 0.100 x 0.100 inch | 5001         | Keystone  |  | Yes |
|  | TP23  | F-IMAX       | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP24  | VDD          | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP35  | PWM1         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP36  | PWM2         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP37  | SKIP#        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP42  | OCP-I        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP44  | O-USR        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP51  | CSP2         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP52  | CSN2         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP56  | CSP1         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP57  | CSN1         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP64  | AGND         | Test Point, Black, Thru Hole Color Keyed                   | 0.100 x 0.100 inch | 5001         | Keystone  |  | Yes |
|  | TP65  | 131-4244-00  | Adaptor, 3.5-mm probe clip ( or 131-5031-00)               | 0.200 inch         | 131-4244-00  | Tektronix |  | Yes |
|  | TP68  | 5V_Q         | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP71  | 5V_CON       | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP72  | 3.3V         | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | TP78  | VR_ON        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP79  | CPGOOD       | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP84  | \VR_HOT      | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP86  | THERM        | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP87  | COMP         | Test Point, O.032 Hole                                     |                    | 5002         | Keystone  |  | Yes |
|  | TP125 | GND          | Test Point, Black, Thru Hole Color Keyed                   | 0.100 x 0.100 inch | 5001         | Keystone  |  | Yes |
|  | TP126 | 5VIN         | Test Point, Red, Thru Hole Color Keyed                     | 0.100 x 0.100 inch | 5000         | Keystone  |  | Yes |
|  | U1    | TPS53625     | IC, 2-phase, D-CAP+ TM Step-Down Controller for VR12.6VCPU | QFN                | TPS53625RSM  | TI        |  | Yes |
|  | U2    | TPS7A8001DRB | IC, Low Noise, High-Bandwidth PSRR LDO 1A Linear Regula    | DRB-8              | TPS7A8001DRB | TI        |  | Yes |
|  | U4    | TPS70102PWP  | IC, Dual Low DropOut Regulator, 500-mA and 250-mA Out      | PWP20              | TPS70102PWP  | TI        |  | Yes |
|  | U9    | TLV3404IPW   | IC, NaNo Power, Open Output Comparators                    | PW14               | TLV3404IPW   | TI        |  | Yes |
|  | U11   | rPGA947-HSW  | Socket, CPU  | BGA-989            | rPGA947-HSW  | FOXCONN   |  | Yes |
|  | U17   | TPS71712DCK  | IC, 150mA, Low Iq, Wide Bandwdth, LDO Linear Regulator     | SC70               | TPS71712DCK  | TI        |  | Yes |
|  | U23   | TS5A23157DGS | IC, Dual 10 Ohms SPDT Analog Switch                        | MSOP-10            | TS5A23157DGS | TI        |  | Yes |

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