

Bill of Materials

TI DESIGNS
TIDA-00269 Gigabit Link Aggregator

| Item | Qty | Reference | Value | Part Description | Manufacturer | Manufacturer Part Number | Alternate Part | PCB Footprint | Note |
|------|-----|--|---------------|------------------|----------------------------------|--------------------------|----------------|---------------|------|
| 1 | 53 | C192, C198, C199, C200, C205, C206, C210, C211, C212, C213, C214, C215, C216, C217, C218, C219, C220, C221, C222, C223, C224, C225, C247, C249, C652, C653, C657, C658, C659, C660, C661, C662, C663, C664, C665, C666, C667, C668, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C691, C692, C693, C193, C195 | 0.1 μ F | Capacitors | Murata Electronics North America | GRM033R60J104ME19D | | 0201 | |
| 2 | 3 | C615, C690, C695 | 1.0 μ F | Capacitors | Tdk Corporation | C0603X5R0J105M | | 0201 | |
| 3 | 1 | C682 | 0.022 μ F | Capacitors | Murata Electronics North America | GRM155R71E223KA61D | | 0402 | |
| 4 | 57 | C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C188, C189, C295, C297, C298, C299, C301, C617, C619, C621, C623, C625, C627, C629, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C655, C656, C670, C671 | 0.1 μ F | Capacitors | Tdk Corporation | C1005X7R1C104K | | 0402 | |
| 5 | 19 | C190, C274, C275, C278, C279, C280, C281, C282, C283, C286, C302, C303, C304, C614, C654, C669, C685, C689, C694 | 1.0 μ F | Capacitors | Taiyo Yuden | LMK105BJ105KV-F | | 0402 | |
| 6 | 1 | C684 | 10 μ F | Capacitors | Murata | GRM155R60J106ME44D | | 0402 | |
| 7 | 1 | C683 | 220pF | Capacitors | Venkel | C0402X7R500-221KNE | | 0402 | |
| 8 | 2 | C35, C49 | 0.015 μ F | Capacitors | Venkel | C0603X7R500-153KNE | | 0603 | |
| 9 | 3 | C686, C687, C688 | 0.1 μ F | Capacitors | Murata Electronics North America | GRM188R71H104KA93D | | 0603 | |
| 10 | 8 | C19, C26, C31, C45, C66, C73, C602, C609 | 1.0 μ F | Capacitors | Tdk Corporation | C1608X7R1C105K | | 0603 | |
| 11 | 4 | C21, C28, C603, C610 | 1000pF | Capacitors | Murata Electronics North America | GCM1885C1H102JA16D | | 0603 | |
| 12 | 2 | C70, C77 | 10pF | Capacitors | Avx Corporation | 06031A100JAT2A | | 0603 | |
| 13 | 8 | C16, C23, C30, C44, C65, C72, C601, C608 | 4.7 μ F | Capacitors | Tdk Corporation | C1608X5R0J475K/0.80 | | 0603 | |

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|------|-----|--|----------------|------------------|----------------------------------|--------------------------|----------------|---------------|------|
| 14 | 11 | C87, C91, C98, C101, C111, C115, C121, C125, C130, C140, C633 | 10000pF | Capacitors | Murata Electronics North America | GRM21BR72A103KA01L | | 0805 | |
| 15 | 18 | C80, C84, C93, C97, C107, C108, C117, C118, C127, C137, C616, C618, C620, C622, C624, C626, C628, C630 | 10µF | Capacitors | Taiyo Yuden | EMK212BJ106KG-T | | 0805 | |
| 16 | 1 | C634 | 10µF | Capacitors | Taiyo Yuden | EMK212BJ106KG-T | | 0805 | |
| 17 | 3 | C635, C636, C637 | 10µF | Capacitors | Taiyo Yuden | EMK212BJ106KG-T | | 0805 | |
| 18 | 2 | C296, C300 | 22µF | Capacitors | Tdk Corporation | C2012X5R0J226M/1.25 | | 0805 | |
| 19 | 11 | C86, C90, C95, C100, C110, C114, C120, C124, C129, C139, C632 | 0.1µF | Capacitors | Murata Electronics North America | GRM319R71H104KA01D | | 1206 | |
| 20 | 19 | C20, C27, C34, C48, C69, C76, C85, C89, C94, C99, C109, C113, C119, C123, C128, C138, C606, C613, C631 | 1.0µF | Capacitors | Yageo America | CC1206KKX7R8BB105 | | 1206 | |
| 21 | 8 | C18, C25, C33, C47, C68, C75, C605, C612 | 10µF | Capacitors | Tdk Corporation | C3216X7R1C106K | | 1206 | |
| 22 | 9 | C17, C24, C32, C46, C67, C74, C136, C604, C611 | 68µF | Capacitors | Tdk Corporation | C3225X5R0J686M | | 1210 | |
| 23 | 8 | C15, C22, C29, C43, C64, C71, C600, C607 | 100µF | Capacitors | Murata Electronics North America | GRM43SR60J107ME20L | | 1812 | |
| 24 | 23 | R292, R294, R451, R491, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R777 | 0.0 (Zero Ohm) | Resistors | Panasonic - Ecg | ERJ-1GE0R00C | | 0201 | |
| 25 | 8 | R667, R668, R672, R673, R686, R687, R691, R692 | 130 | Resistors | Panasonic - Ecg | ERJ-1GEF1300C | | 0201 | |
| 26 | 16 | R676, R677, R678, R679, R680, R681, R682, R683, R695, R696, R697, R698, R699, R700, R701, R702 | 150 | Resistors | Panasonic - Ecg | ERJ-1GEF1500C | | 0201 | |
| 27 | 1 | R779 | 3.16K | Resistors | Panasonic - Ecg | ERJ-1GEF3161C | | 0201 | |
| 28 | 1 | R778 | 5.49K | Resistors | Panasonic - Ecg | ERJ-1GEF5491C | | 0201 | |
| 29 | 8 | R665, R666, R670, R671, R684, R685, R689, R690 | 82.5 | Resistors | Panasonic - Ecg | ERJ-1GEF82R5C | | 0201 | |
| 30 | 63 | R273, R274, R275, R276, R277, R279, R283, R285, R286, R287, R296, R297, R308, R309, R459, R460, R461, R462, R463, R466, R486, R508, R509, R510, R511, R532, R533, R621, R622, R629, R630, R632, R633, R651, R652, R653, R654, R655, R656, R659, R660, R661, R662, R663, R664, R704, R720, R721, R722, R727, R754, R755, R756, R757, R765, R766, R767, R768, R769, R770, R771, R788, R789 | 0.0 (Zero Ohm) | Resistors | Panasonic - Ecg | ERJ-2GE0R00X | | 0402 | |
| 31 | 3 | R551, R641, R644 | 100 | Resistors | Panasonic - Ecg | ERJ-2RKF1000X | | 0402 | |
| 32 | 10 | R546, R548, R708, R709, R730, R731, R738, R739, R746, R747 | 100K | Resistors | Yageo America | RC0402FR-07100KL | | 0402 | |
| 33 | 2 | R258, R259 | 20.0K | Resistors | Panasonic - Ecg | ERJ-2RKF2002X | | 0402 | |

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|------|-----|--|----------------------|------------------------|----------------------------------|--------------------------|----------------|---------------|------|
| 34 | 11 | R278, R280, R281, R282, R284, R616, R705, R710, R711, R776, R792 | 249 | Resistors | Venkel | CR0402-16W-2490FT | | 0402 | |
| 35 | 4 | R288, R289, R306, R307 | 4.02K | Resistors | Vishay/Dale | CRCW04024K02FKED | | 0402 | |
| 36 | 36 | R245, R270, R300, R301, R302, R303, R304, R305, R556, R557, R558, R559, R560, R561, R562, R563, R564, R614, R631, R642, R645, R648, R669, R688, R706, R707, R714, R715, R716, R717, R750, R751, R752, R753, R786, R787 | 4.99K | Resistors | Venkel | CR0402-16W-4991FT | | 0402 | |
| 37 | 1 | R703 | 402 | Resistors | Panasonic - Ecg | ERJ-2RKF4020X | | 0402 | |
| 38 | 2 | R549, R553 | 44.2K | Resistors | Panasonic - Ecg | ERJ-2RKF4422X | | 0402 | |
| 39 | 13 | R247, R248, R249, R250, R251, R252, R253, R254, R255, R619, R620, R643, R646 | 49.9K | Resistors | Venkel | CR0402-16W-4992FT | | 0402 | |
| 40 | 7 | R269, R613, R712, R713, R723, R735, R743 | 0.0 (Zero Ohm) | Resistors | Panasonic - Ecg | ERJ-3GEY0R00V | | 0603 | |
| 41 | 6 | L106 | 0.0 (Zero Ohm) | Resistors | Panasonic - Ecg | ERJ-3GEY0R00V | | 0603 | |
| 42 | 6 | R50, R67, R171, R188, R603, R607 | 1.13K | Resistors | Yageo America | RC0603FR-071K13L | | 0603 | |
| 43 | 1 | R371 | 1.21K | Resistors | Panasonic - Ecg | ERJ-3EKF1211V | | 0603 | |
| 44 | 10 | R538, R540, R545, R547, R732, R733, R740, R741, R748, R749 | 100 | Resistors | Panasonic - Ecg | ERJ-3EKF1000V | | 0603 | |
| 45 | 5 | R244, R541, R729, R737, R745 | 100K | Resistors | Yageo America | RC0603FR-07100KL | | 0603 | |
| 46 | 2 | R242, R246 | 130 | Resistors | Panasonic - Ecg | ERJ-3EKF1300V | | 0603 | |
| 47 | 1 | R120 | 2.80K | Resistors | Panasonic - Ecg | ERJ-3EKF2801V | | 0603 | |
| 48 | 2 | R610, R611 | 3.01 | Resistors | Venkel | CR0603-10W-3R01FT | | 0603 | |
| 49 | 3 | R118, R169, R186 | 3.57K | Resistors | Panasonic - Ecg | ERJ-3EKF3571V | | 0603 | |
| 50 | 4 | R52, R69, R604, R608 | 4.02K | Resistors | Panasonic - Ecg | ERJ-3EKF4021V | | 0603 | |
| 51 | 1 | R84 | 4.12K | Resistors | Yageo | RC0603FR-074K12L | | 0603 | |
| 52 | 1 | R86 | 4.53K | Resistors | Panasonic - Ecg | ERJ-3EKF4531V | | 0603 | |
| 53 | 16 | R49, R66, R83, R117, R168, R185, R239, R241, R539, R602, R606, R718, R719, R725, R734, R742 | 4.99K | Resistors | Panasonic - Ecg | ERJ-3EKF4991V | | 0603 | |
| 54 | 1 | R612 | 47 | Resistors | Panasonic - Ecg | ERJ-3EKF47R0V | | 0603 | |
| 55 | 5 | R243, R543, R728, R736, R744 | 49.9 | Resistors | Panasonic - Ecg | ERJ-3EKF49R9V | | 0603 | |
| 56 | 1 | R465 | 49.9K | Resistors | Venkel | CR0603-16W-4992FT | | 0603 | |
| 57 | 4 | R600, R601, R605, R609 | 88.7 | Resistors | Panasonic - Ecg | ERJ-3EKF88R7V | | 0603 | |
| 58 | 2 | R542, R544 | 0.0 (Zero Ohm) | Resistors | Yageo America | RC0805JR-070RL | | 0805 | |
| 59 | 10 | L1, L2, L3, L4, L5, L6, L7, L8, L9, L14 | 0.0 (Zero Ohm) | Resistors | Koa Speer | RK73Z2ETTE | | 1210 | |
| 60 | 6 | L100, L101, L102, L103, L104, L105 | 1000 | Filters | Murata Electronics North America | BLM18HD102SN1D | | 0603 | |
| 61 | 2 | L15, L16 | 4.7µH | Inductors_Coils_Chokes | Tdk Corporation | NLV32T-4R7J-PF | | 1210 | |
| 62 | 1 | D28 | LED - Blue Diffuse | Optoelectronics | Avago Technologies Us Inc | HSMR-C170 | | 0805 | |
| 63 | 12 | D11, D14, D15, D16, D49, D100, D101, D102, D104, D106, D108, D110 | LED - Green Diffuse | Optoelectronics | Avago Technologies Us Inc | HSMG-C170 | | 0805 | |
| 64 | 2 | D48, D111 | LED - Orange Diffuse | Optoelectronics | Avago Technologies Us Inc. | HSMD-C170 | | 0805 | |
| 65 | 8 | D10, D12, D13, D50, D51, D105, D107, D109 | LED - Red Diffuse | Optoelectronics | Lumex Opto/Components Inc | SML-LXT0805IW-TR | | 0805 | |

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|------|-----|--|-------------------|---------------------------------|--------------------------------------|--------------------------|----------------|-------------------|------|
| 66 | 2 | D52, D103 | LED - Yellow Diff | Optoelectronics | Lumex Opto/Components Inc | SML-LXT0805YW-TR | | 0805 | |
| 67 | 1 | D9 | BAT 60A E6327 | Discrete Semiconductor Products | Infineon Technologies | BAT 60A E6327 | | SOD-323 | |
| 68 | 14 | Q3, Q4, Q5, Q6, Q7, Q11, Q12, Q100, Q101, Q102, Q103, Q104, Q105, Q106 | N - Channel | Discrete Semiconductor Products | Fairchild Semiconductor | FDV301N | | SOT-23-3 | |
| 69 | 7 | U38, U93, U94, U106, U109, U111, U113 | NPN | Discrete Semiconductor Products | Zetex Inc | ZXTD09N50DE6TA | | SOT-23-6 | |
| 70 | 1 | U1 | TLK10081 | Integrated Circuits | Texas Instruments | TLK10081 | | 144-BGA | |
| 71 | 2 | U104, U105 | CDCLVP1204 | Integrated Circuits | Texas Instruments | CDCLVP1204 | | 16-HQFN | |
| 72 | 3 | U40, U41, U64 | TXB0108PWR | Integrated Circuits | Texas Instruments | TXB0108PWR | | 20-TSSOP | |
| 73 | 1 | U43 | TXS0108EPW | Integrated Circuits | Texas Instruments | TXS0108EPW | | 20-TSSOP | |
| 74 | 8 | U8, U10, U12, U16, U22, U24, U101, U102 | TPS74401RGWT | Integrated Circuits | Texas Instruments | TPS74401RGWT | | 20-VQFN | |
| 75 | 1 | U42 | TCA6424RGJR | Integrated Circuits | Texas Instruments | TCA6424RGJR | | 32-QFN | |
| 76 | 1 | U100 | CDCM6208V1RG | Integrated Circuits | Texas Instruments | CDCM6208V1RGZ | | 48-HQFN | |
| 77 | 1 | U107 | SN74LVC1G08D | Integrated Circuits | Texas Instruments | SN74LVC1G08DBVR | | SOT-23-5 | |
| 78 | 1 | U103 | TLV70225DBVT | Integrated Circuits | Texas Instruments | TLV70225DBVT | | SOT-23-5 | |
| 79 | 2 | U114, U115 | TLV70233DBVT | Integrated Circuits | Texas Instruments | TLV70233DBVT | | SOT-23-5 | |
| 80 | 5 | U37, U92, U108, U110, U112 | TPS3125J18DBV | Integrated Circuits | Texas Instruments | TPS3125J18DBVR | | SOT-23-5 | |
| 81 | 1 | U36 | SN74AVCH1T45 | Integrated Circuits | Texas Instruments | SN74AVCH1T45DCKR | | SOT-23-6 | |
| 82 | 4 | K1, K2, K3, K4 | SPST-NO | Relays | Panasonic Electric Works | AQY221R2TY | | 4-VSSOP | |
| 83 | 1 | Y10 | 30.72Mhz | Crystals | Ndk-America | NZ2016SA_30.72MHz | | SMT Crystal | |
| 84 | 1 | Y11 | 31.25Mhz | Crystals | Ndk-America | NZ2016SA_31.25MHz | | SMT Crystal | |
| 85 | 2 | SW18, SW19 | 2 SPST | Switches | Itt Cannon - C&K | TDA02H0SB1 | | 0.05" Pitch | |
| 86 | 1 | SW11 | 10 SPST | Switches | Itt Cannon - C&K | TDA10H0SB1 | | 16 SMD Half Pitch | |
| 87 | 4 | SW10, SW13, SW14, SW15 | PB SPST Off-Mo | Switches | Omron Electronics Inc-Ecb Div | B3U-1100P | | 3.00mm x 2.50mm | |
| 88 | 2 | SW12, SW16 | 4 SPST | Switches | Itt Cannon - C&K | TDA04H0SB1R | | 4 pos | |
| 89 | 1 | SW17 | 8 SPST | Switches | Itt Cannon - C&K | TDA08H0SK1 | | 8 pos | |
| 90 | 3 | JMP36, JMP100, JMP101 | 1 X 2 | Connectors | Samtec | HTSW-150-08-G-S | | 0.1" | |
| 91 | 4 | JMP35, JMP41, JMP42, JMP62 | 1 X 3 | Connectors | Samtec | HTSW-150-08-G-S | | 0.1" | |
| 92 | 1 | JMP77 | 1 X 4 | Connectors | Samtec | HTSW-150-08-G-S | | 0.1" | |
| 93 | 3 | JMP50, JMP103, JMP105 | 2 X 2 | Connectors | Samtec | HTSW-150-08-G-D | | 0.1x0.1" | |
| 94 | 1 | JMP61 | 2 X 4 | Connectors | Samtec | HTSW-150-08-G-D | | 0.1x0.1" | |
| 95 | 2 | JMP47, JMP48 | 2 X 5 | Connectors | Samtec | HTSW-150-08-G-D | | 0.1x0.1" | |
| 96 | 2 | JMP102, JMP104 | 2 X 6 | Connectors | Samtec | HTSW-150-08-G-D | | 0.1x0.1" | |
| 97 | 1 | J101 | 2 X 20 - Mini Edg | Connectors | Samtec | MEC1-120-02-F-D-A | | 1.00mm | |
| 98 | 1 | J100 | 2 X 30 - Mini Edg | Connectors | Samtec | MEC1-130-02-F-D-A | | 1.00mm | |
| 99 | 1 | P26 | Power Jack | Connectors | Cui Inc | PJ-002AH | | 2.1mm X 5.5mm | |
| 100 | 2 | P1, P14 | Banana Plug - Me | Connectors | Emerson Network Pwr Connectivity Sol | 108-0740-001 | | 4mm | |
| 101 | 1 | J73 | 1888247-1 | Connectors | Amp/Tyco | 1888247-1 | | Receptacle | |

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|------|-----|--|---------------------|--------------------|------------------------|--------------------------|----------------|-----------------------|------|
| 102 | 4 | J5, J6, J7, J8 | Edge Launch | Connectors | Rosenberger | 32K243-40ML5 | | RF Screw Type SMA | |
| 103 | 2 | J72, J102 | ASP-134486-01 | Connectors | Samtec | ASP-134486-01 | | Special Made Part | |
| 104 | 1 | XJ73 | SFP Cage | Connectors | Tyco Electronics / Amp | 1489669-1 | | T/H - R/A - Press-Fit | |
| 105 | 10 | J41, J42, J43, J44, J45, J46, J47, J48, J103, J104 | 32K141-40ML5 | Connectors | Rosenberger | 32K141-40ML5 | | T/H_SMT SMA | |
| 106 | 23 | | Shunt | Hardware | Kobiconn | 151-8000-E | | 0.1" SP | |
| 107 | 8 | Standoff | ECA-1HM101 | Hardware | Samtec | SO-1015-03-01-02 | | 4-40 Hex - M/F | |
| 108 | 4 | Screws | 0.25" - Stainless S | Hardware | Building Fasteners | PMSSS 440 0025 PH | | 4-40 Phillips Panhead | |
| 109 | 4 | Standoff | 0.5" - Aluminum | Hardware | Keystone Electronics | 2027 | | 4-40 Round - F/F | |
| 110 | 8 | C194, C196, C201, C202, C203, C204, C191, C197 | DNI | Undefined Category | Dni | dni | | DNI | |
| 111 | 2 | R784, R785 | DNI | Undefined Category | Dni | dni | | DNI | |
| 112 | 2 | R780, R781 | DNI | Undefined Category | Dni | dni | | DNI | |
| 113 | 64 | R496, R497, R498, R499, R674, R675, R693, R694, R782, R783, R293, R295, R298, R299, R623, R624, R634, R635, R636, R637, R649, R650, R726, R758, R759, R760, R761, R762, R763, R764, R240, R256, R257, R262, R263, R472, R473, R615, R617, R618, R625, R626, R627, R628, R638, R647, R657, R658, R772, R773, R774, R775, R790, R791, R793, R794, R795, R796, R476, R477, R290, R291, R268, R639, R640, R724 | DNI | Undefined Category | Dni | DNI | | DNI | |
| 114 | 16 | TH1, TH2, TH3, TH4, TH5, TH6, TH7, TH8, TH9, TH10, TH11, TH12, TH13, TH14, TH15, TH16 | DNI | Undefined Category | Dni | dni | | DNI | |

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