

Figure 1. AEK-MCU-C4M2 circuit schematic (1 of 11)

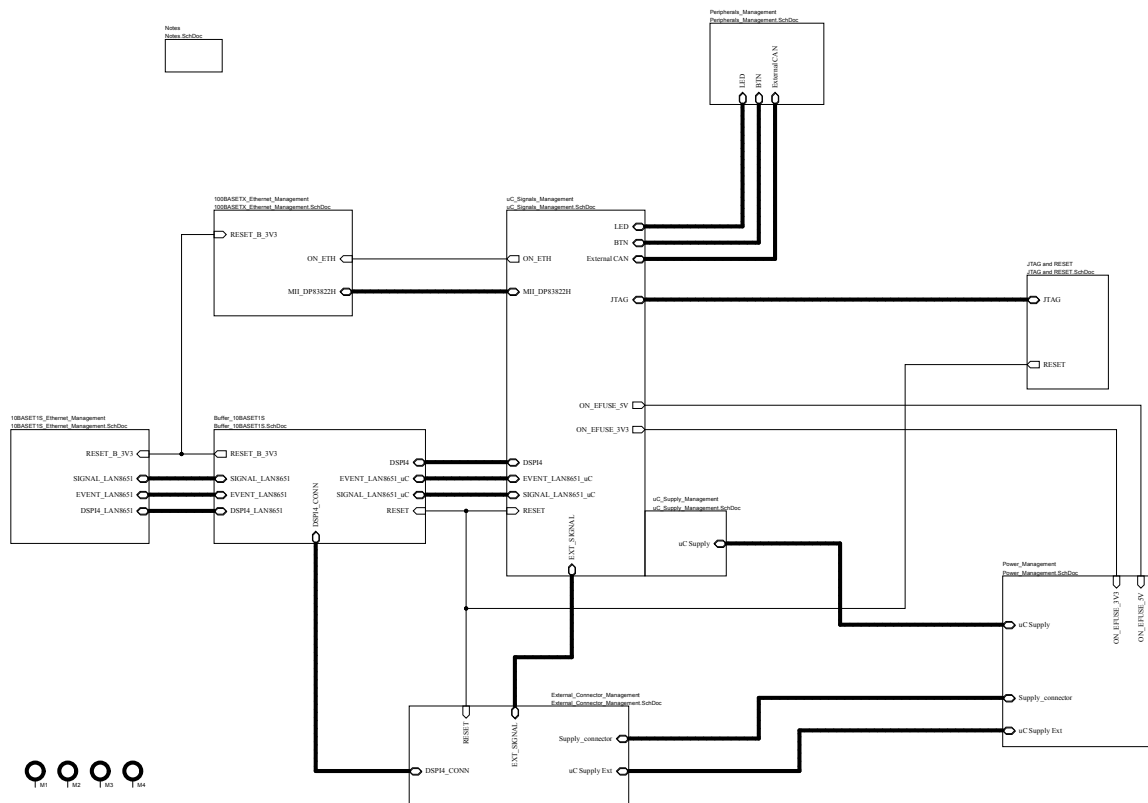


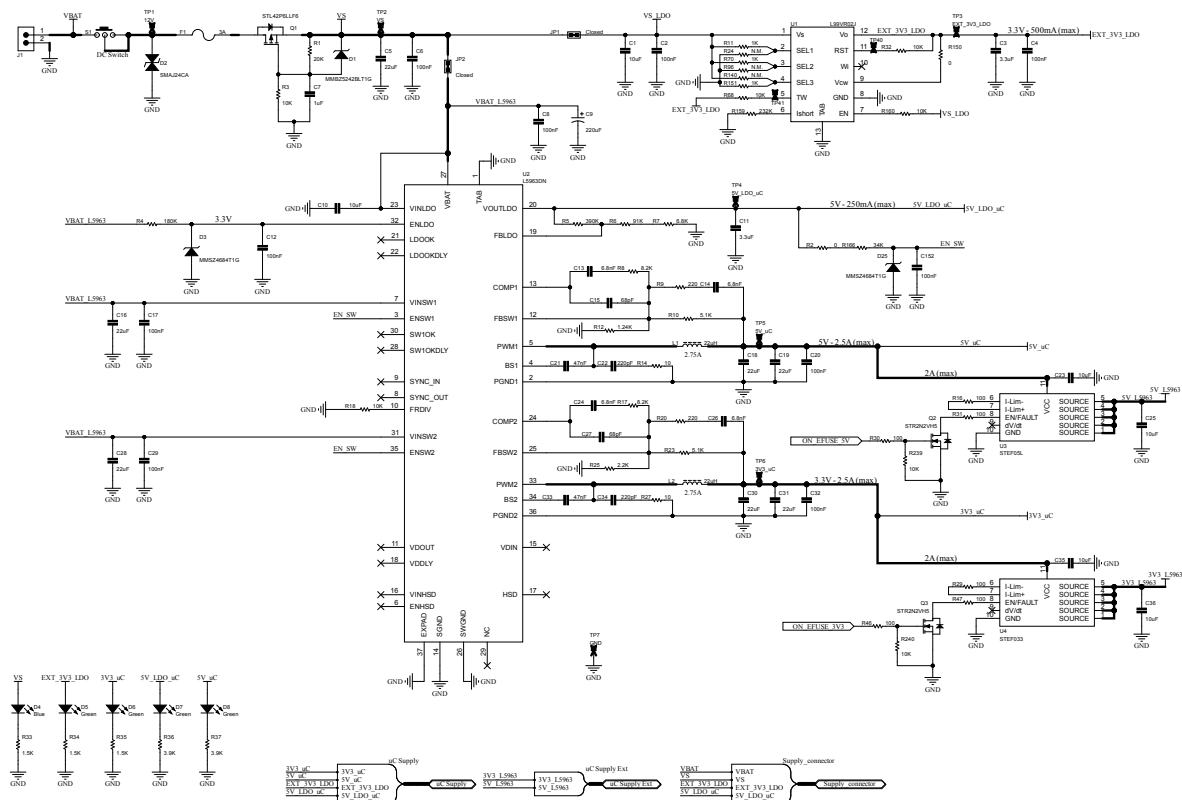
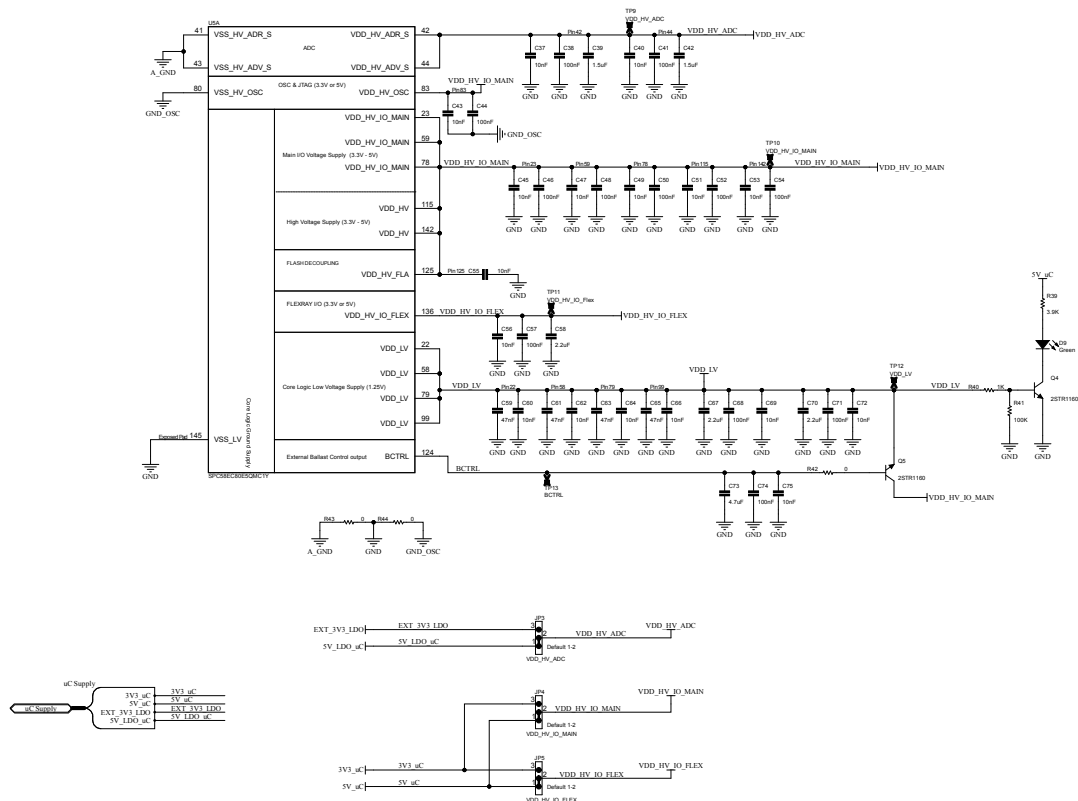
Figure 2. AEK-MCU-C4M2 circuit schematic (2 of 11)

Figure 3. AEK-MCU-C4M2 circuit schematic (3 of 11)


Figure 4. AEK-MCU-C4M2 circuit schematic (4 of 11)

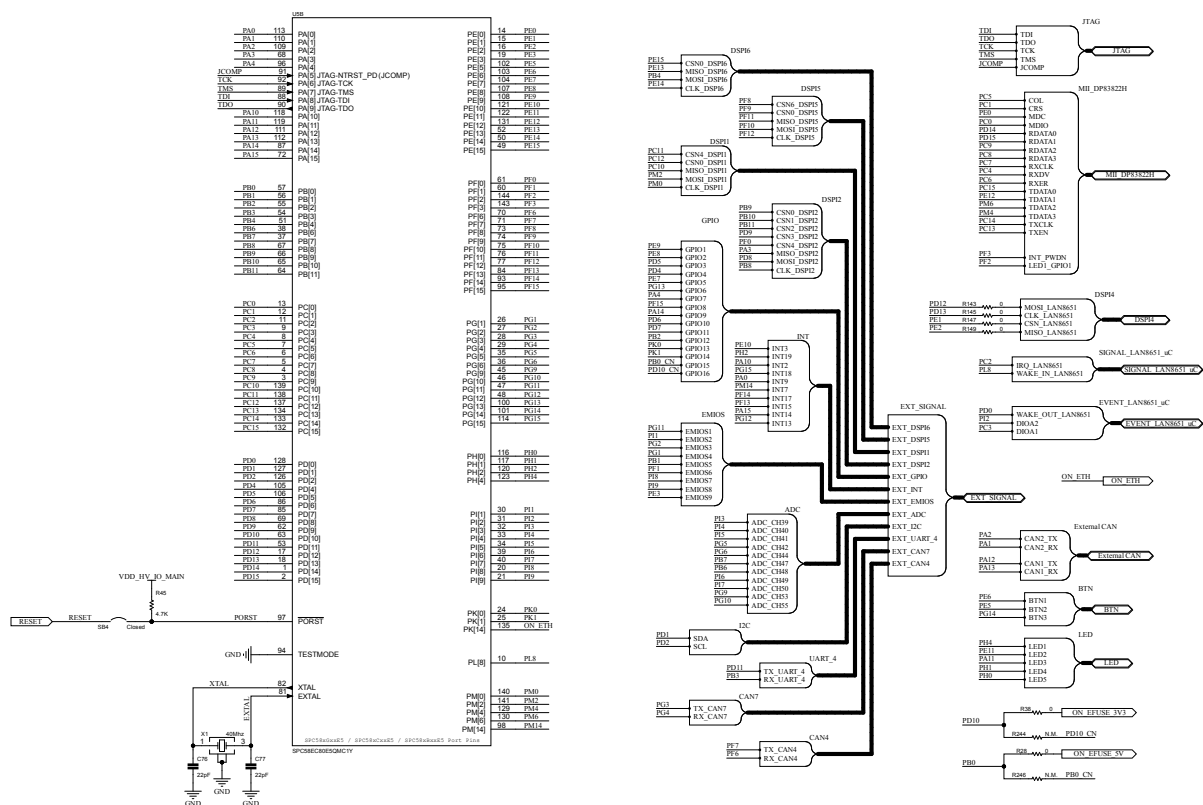
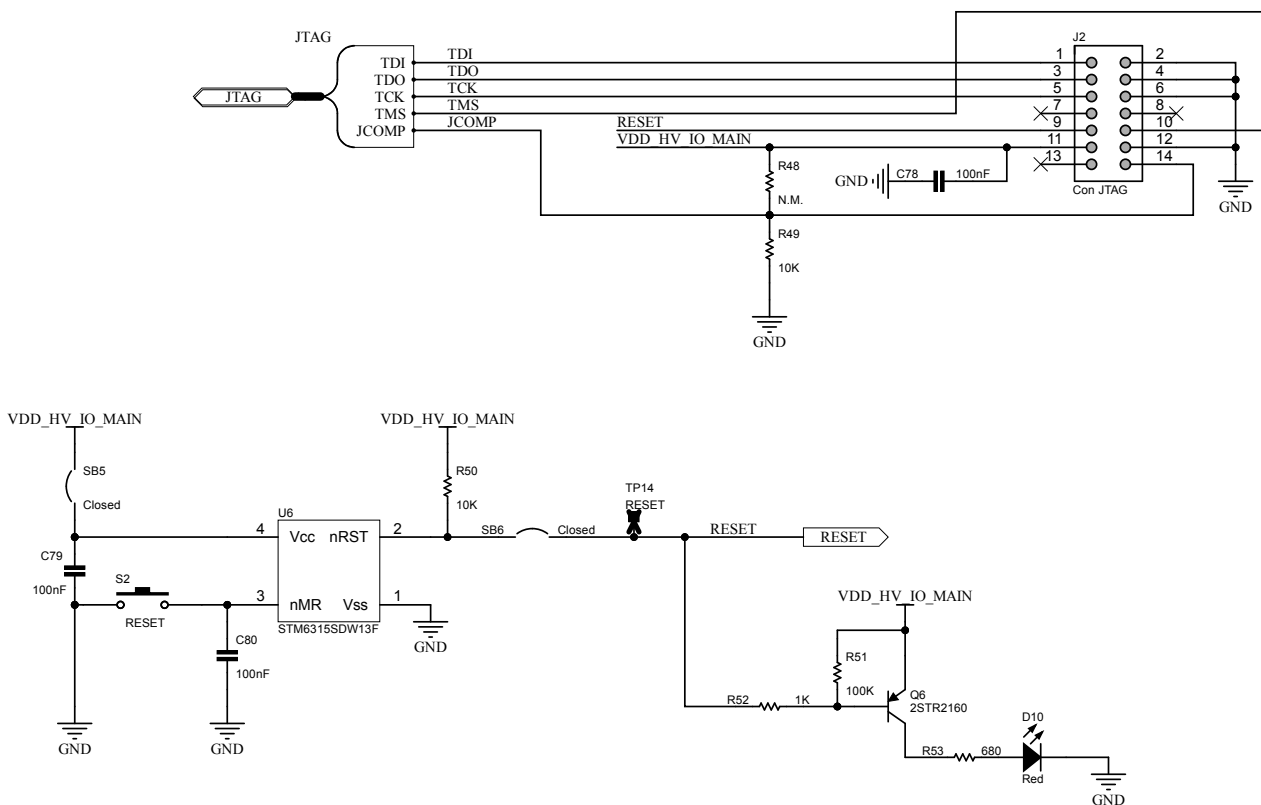


Figure 5. AEK-MCU-C4M2 circuit schematic (5 of 11)



The diagram illustrates the TI-RTOS on-chip peripheral configuration for the MSP430F5529. It shows the internal structure of the device, including the CPU, memory, and various peripheral modules like the UART, SPI, I2C, and ADC. The diagram is divided into several sections, each representing a different peripheral or pin group. Key components include the CPU, memory, UART, SPI, I2C, ADC, and various pins. The diagram is labeled with 'TI-RTOS on-chip peripheral configuration' and 'MSP430F5529'.

Pin Definitions and Connections:

- EXT, EXT1, LED0:** Connected to the CPU and memory.
- EXT2, EXT3, EXT4, EXT5, EXT6, EXT7, EXT8, EXT9, EXT10, EXT11, EXT12, EXT13, EXT14, EXT15, EXT16, EXT17, EXT18, EXT19, EXT20, EXT21, EXT22, EXT23, EXT24, EXT25, EXT26, EXT27, EXT28, EXT29, EXT30, EXT31, EXT32, EXT33, EXT34, EXT35, EXT36, EXT37, EXT38, EXT39, EXT40, EXT41, EXT42, EXT43, EXT44, EXT45, EXT46, EXT47, EXT48, EXT49, EXT50, EXT51, EXT52, EXT53, EXT54, EXT55, EXT56, EXT57, EXT58, EXT59, EXT60, EXT61, EXT62, EXT63, EXT64, EXT65, EXT66, EXT67, EXT68, EXT69, EXT70, EXT71, EXT72, EXT73, EXT74, EXT75, EXT76, EXT77, EXT78, EXT79, EXT80, EXT81, EXT82, EXT83, EXT84, EXT85, EXT86, EXT87, EXT88, EXT89, EXT90, EXT91, EXT92, EXT93, EXT94, EXT95, EXT96, EXT97, EXT98, EXT99, EXT100, EXT101, EXT102, EXT103, EXT104, EXT105, EXT106, EXT107, EXT108, EXT109, EXT110, EXT111, EXT112, EXT113, EXT114, EXT115, EXT116, EXT117, EXT118, EXT119, EXT120, EXT121, EXT122, EXT123, EXT124, EXT125, EXT126, EXT127, EXT128, EXT129, EXT130, EXT131, EXT132, EXT133, EXT134, EXT135, EXT136, EXT137, EXT138, EXT139, 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EXT765, EXT766, EXT767, EXT768, EXT769, EXT770, EXT771, EXT772, EXT773, EXT774, EXT775, EXT776, EXT7**

The schematic diagram illustrates the LAN8651 evaluation board, detailing its electrical components and connections. Key features include:

- Power Management:**
 - VDDP_LAN8651:** Powered by a 1V1_LAN8651 regulator with a 100nF bypass capacitor.
 - VDDAU_LAN8651:** Powered by a VDDAU_LAN8651 regulator with a 100nF bypass capacitor.
 - Isolated Power Islands:** Includes an isolated VDDP power island with 100nF capacitors and an isolated VDDAU power island with 100nF capacitors.
 - CC02P66 Power Island:** A dedicated power island for the CC02P66 component, featuring a 100nF capacitor.
- Signal Connections:**
 - EXT_IO_100:** A 100-ohm termination resistor connected to the EXT_IO_100 signal.
 - EXT_IO_100:** A 100-ohm termination resistor connected to the EXT_IO_100 signal.
 - EXT_IO_100:** A 100-ohm termination resistor connected to the EXT_IO_100 signal.
 - EXT_IO_100:** A 100-ohm termination resistor connected to the EXT_IO_100 signal.
- Component Values:**
 - Resistors: 100k, 10k, 1k, 100n, 100p, 100m, 100f, 100g, 100h, 100i, 100j, 100k, 100l, 100m, 100n, 100p, 100q, 100r, 100s, 100t, 100u, 100v, 100w, 100x, 100y, 100z, 100aa, 100ab, 100ac, 100ad, 100ae, 100af, 100ag, 100ah, 100ai, 100aj, 100ak, 100al, 100am, 100an, 100ao, 100ap, 100aq, 100ar, 100as, 100at, 100au, 100av, 100aw, 100ax, 100ay, 100az, 100ba, 100bb, 100bc, 100bd, 100be, 100bf, 100bg, 100bh, 100bi, 100bj, 100bk, 100bl, 100bm, 100bn, 100bo, 100bp, 100bq, 100br, 100bs, 100bt, 100bu, 100bv, 100bw, 100bx, 100by, 100bz, 100ca, 100cb, 100cc, 100cd, 100ce, 100cf, 100cg, 100ch, 100ci, 100cj, 100ck, 100cl, 100cm, 100cn, 100co, 100cp, 100cq, 100cr, 100cs, 100ct, 100cu, 100cv, 100cw, 100cx, 100cy, 100cz, 100da, 100db, 100dc, 100dd, 100de, 100df, 100dg, 100dh, 100di, 100dj, 100dk, 100dl, 100dm, 100dn, 100do, 100dp, 100dq, 100dr, 100ds, 100dt, 100du, 100dv, 100dw, 100dx, 100dy, 100dz, 100ea, 100eb, 100ec, 100ed, 100ee, 100ef, 100eg, 100eh, 100ei, 100ej, 100ek, 100el, 100em, 100en, 100eo, 100ep, 100eq, 100er, 100es, 100et, 100eu, 100ev, 100ew, 100ex, 100ey, 100ez, 100fa, 100fb, 100fc, 100fd, 100fe, 100ff, 100fg, 100fh, 100fi, 100fj, 100fk, 100fl, 100fm, 100fn, 100fo, 100fp, 100fq, 100fr, 100fs, 100ft, 100fu, 100fv, 100fw, 100fx, 100fy, 100fz, 100ga, 100gb, 100gc, 100gd, 100ge, 100gf, 100gg, 100gh, 100gi, 100gj, 100gk, 100gl, 100gm, 100gn, 100go, 100gp, 100gq, 100gr, 100gs, 100gt, 100gu, 100gv, 100gw, 100gx, 100gy, 100gz, 100ha, 100hb, 100hc, 100hd, 100he, 100hf, 100hg, 100hi, 100hj, 100hk, 100hl, 100hm, 100hn, 100ho, 100hp, 100hq, 100hr, 100hs, 100ht, 100hu, 100hv, 100hw, 100hx, 100hy, 100hz, 100ia, 100ib, 100ic, 100id, 100ie, 100if, 100ig, 100ih, 100ii, 100ij, 100ik, 100il, 100im, 100in, 100io, 100ip, 100iq, 100ir, 100is, 100it, 100iu, 100iv, 100iw, 100ix, 100iy, 100iz, 100ja, 100jb, 100jc, 100jd, 100je, 100jf, 100jg, 100jh, 100ji, 100jj, 100jk, 100jl, 100jm, 100jn, 100jo, 100jp, 100jq, 100jr, 100js, 100jt, 100ju, 100jv, 100jw, 100jx, 100jy, 100jz, 100ka, 100kb, 100kc, 100kd, 100ke, 100kf, 100kg, 100kh, 100ki, 100kj, 100kk, 100kl, 100km, 100kn, 100ko, 100kp, 100kq, 100kr, 100ks, 100kt, 100ku, 100kv, 100kw, 100kx, 100ky, 100kz, 100la, 100lb, 100lc, 100ld, 100le, 100lf, 100lg, 100lh, 100li, 100lj, 100lk, 100ll, 100lm, 100ln, 100lo, 100lp, 100lq, 100lr, 100ls, 100lt, 100lu, 100lv, 100lw, 100lx, 100ly, 100lz, 100ma, 100mb, 100mc, 100md, 100me, 100mf, 100mg, 100mh, 100mi, 100mj, 100mk, 100ml, 100mm, 100mn, 100mo, 100mp, 100mq, 100mr, 100ms, 100mt, 100mu, 100mv, 100mw, 100mx, 100my, 100mz, 100na, 100nb, 100nc, 100nd, 100ne, 100nf, 100ng, 100nh, 100ni, 100nj, 100nk, 100nl, 100nm, 100nn, 100no, 100np, 100nq, 100nr, 100ns, 100nt, 100nu, 100nv, 100nw, 100nx, 100ny, 100nz, 100oa, 100ob, 100oc, 100od, 100oe, 100of, 100og, 100oh, 100oi, 100oj, 100ok, 100ol, 100om, 100on, 100oo, 100op, 100oq, 100or, 100os, 100ot, 100ou, 100ov, 100ow, 100ox, 100oy, 100oz, 100pa, 100pb, 100pc, 100pd, 100pe, 100pf, 100pg, 100ph, 100pi, 100pj, 100pk, 100pl, 100pm, 100pn, 100po, 100pp, 100pq, 100pr, 100ps, 100pt, 100pu, 100pv, 100pw, 100px, 100py, 100pz, 100qa, 100qb, 100qc, 100qd, 100qe, 100qf, 100qg, 100qh, 100qi, 100qj, 100qk, 100ql, 100qm, 100qn, 100qo, 100qp, 100qq, 100qr, 100qs, 100qt, 100qu, 100qv, 100qw, 100qx, 100qy, 100qz, 100ra, 100rb, 100rc, 100rd, 100re, 100rf, 100rg, 100rh, 100ri, 100rj, 100rk, 100rl, 100rm, 100rn, 100ro, 100rp, 100rq, 100rr, 100rs, 100rt, 100ru, 100rv, 100rw, 100rx, 100ry, 100rz, 100sa, 100sb, 100sc, 100sd, 100se, 100sf, 100sg, 100sh, 100si, 100sj, 100sk, 100sl, 100sm, 100sn, 100so, 100sp, 100sq, 100sr, 100ss, 100st, 100su, 100sv, 100sw, 100sx, 100sy, 100sz, 100ta, 100tb, 100tc, 100td, 100te, 100tf, 100tg, 100th, 100ti, 100tj, 100tk, 100tl, 100tm, 100tn, 100to, 100tp, 100tq, 100tr, 100ts, 100tt, 100tu, 100tv, 100tw, 100tx, 100ty, 100tz, 100ua, 100ub, 100uc, 100ud, 100ue, 100uf, 100ug, 100uh, 100ui, 100uj, 100uk, 100ul, 100um, 100un, 100uo, 100up, 100uq, 100ur, 100us, 100ut, 100uu, 100uv, 100uw, 100ux, 100uy, 100uz, 100va, 100vb, 100vc, 100vd, 100ve, 100vf, 100vg, 100vh, 100vi, 100vj, 100vk, 100vl, 100vm, 100vn, 100vo, 100vp, 100vq, 100vr, 100vs, 100vt, 100vu, 100vv, 100vw, 100vx, 100vy, 100vz, 100wa, 100wb, 100wc, 100wd, 100we, 100wf, 100wg,

[illegible]

Figure 10. AEK-MCU-C4M2 circuit schematic (10 of 11)

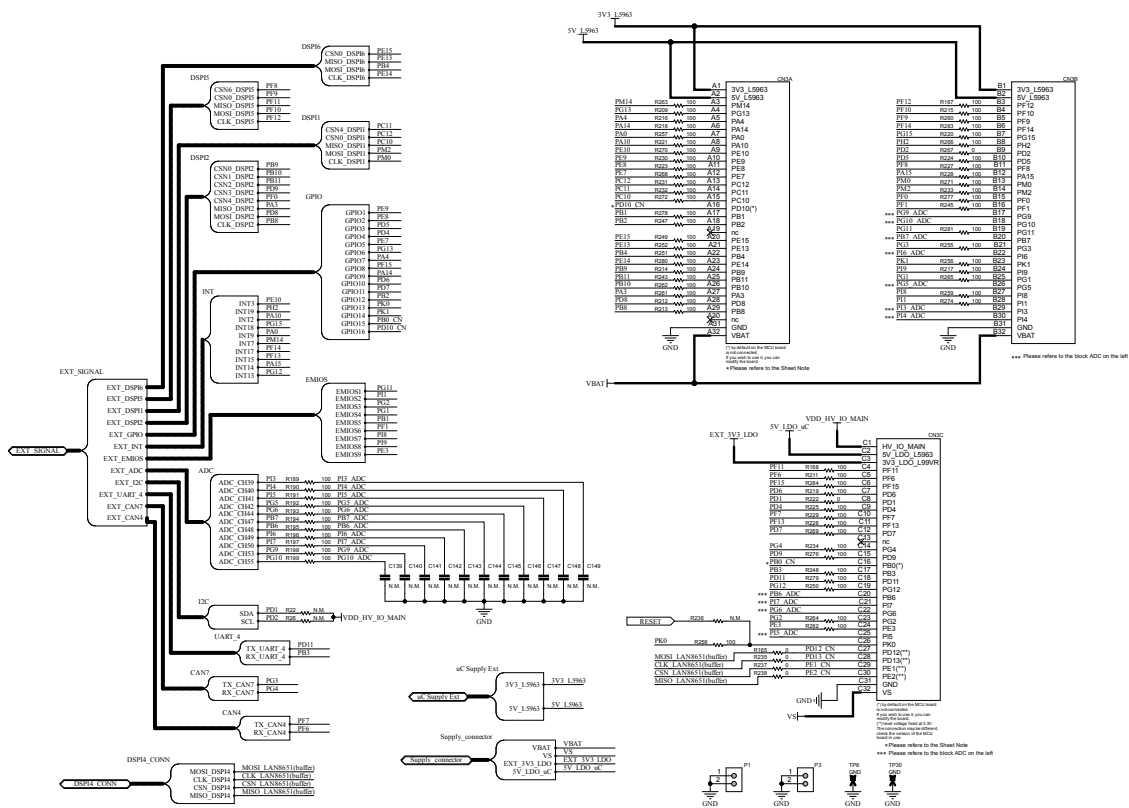
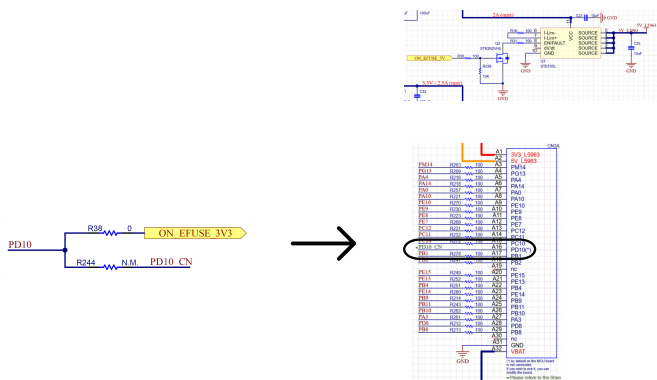
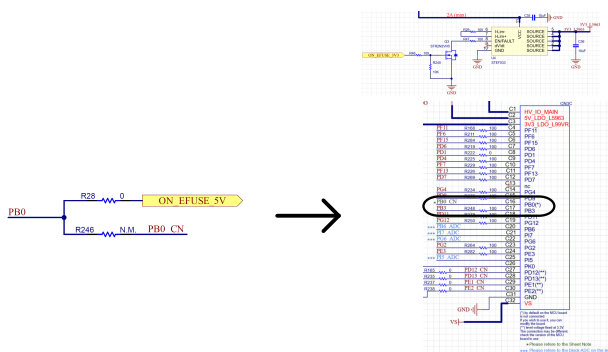


Figure 11. AEK-MCU-C4M2 circuit schematic (11 of 11)



Pin not connected on the "96pin connector," by default it is used to enable/disable the eFuse @5V (U3_STEF05L).

To connect PB0 to the "96pin connector" remove R28 and mount a 0R on R246 (this way the eFuse always stays on and is no longer managed by the MCU)



Pin not connected on the "96pin connector," by default it is used to enable/disable the eFuse @3.3V (U4_STEF033).

To connect PD10 to the "96pin connector" remove R38 and mount a 0R on R244 (this way the eFuse always stays on and is no longer managed by the MCU).

Figure 12. AEK-CON-LIT2 circuit schematic

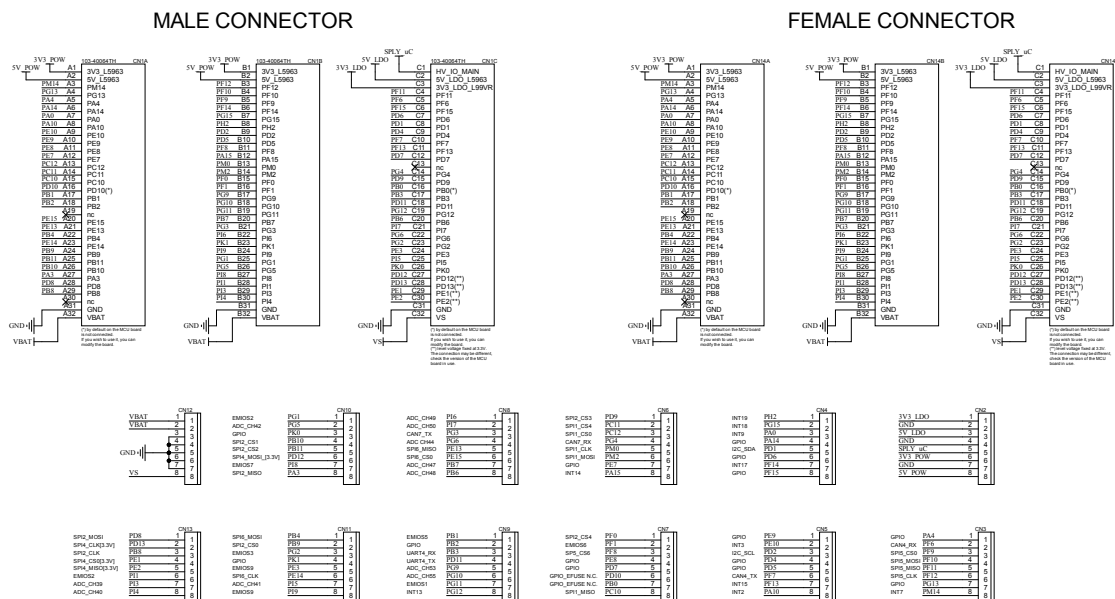


Figure 13. AEK-CON-LTA2 circuit schematic (1 of 3)

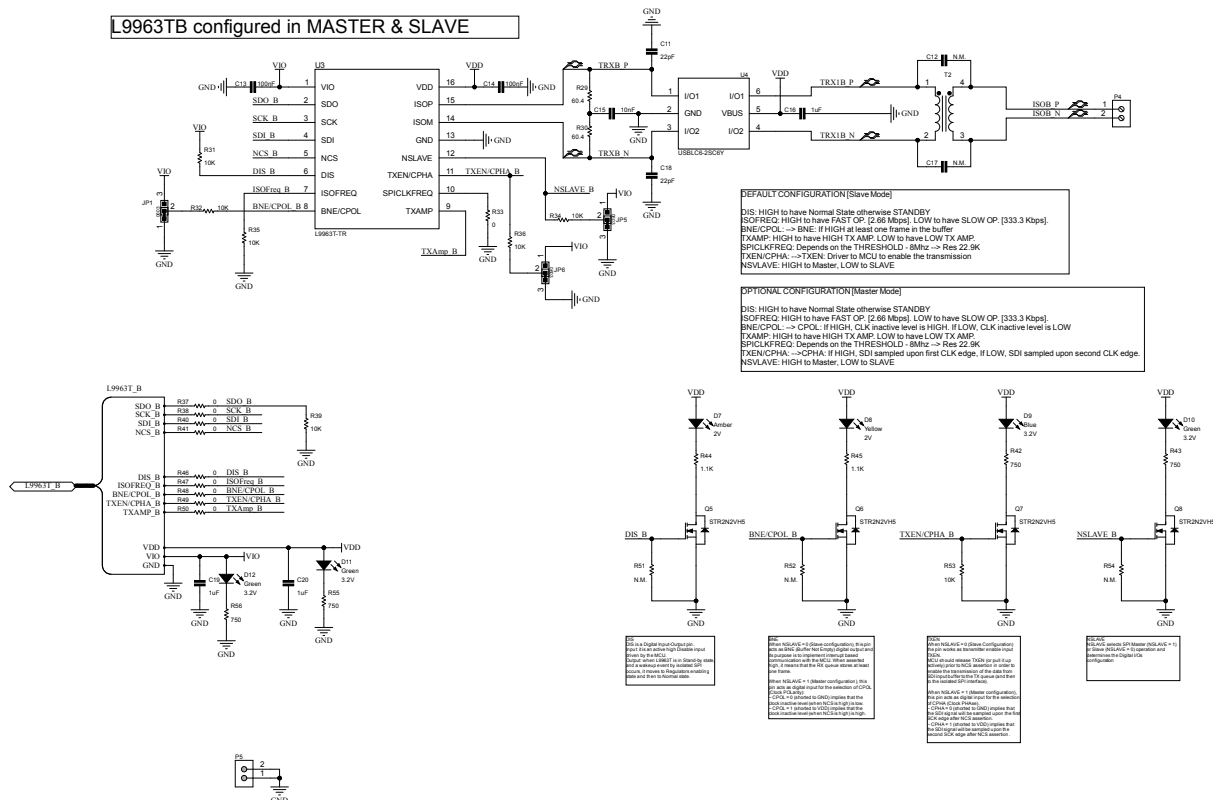


Figure 14. AEK-CON-LTA2 circuit schematic (2 of 3)

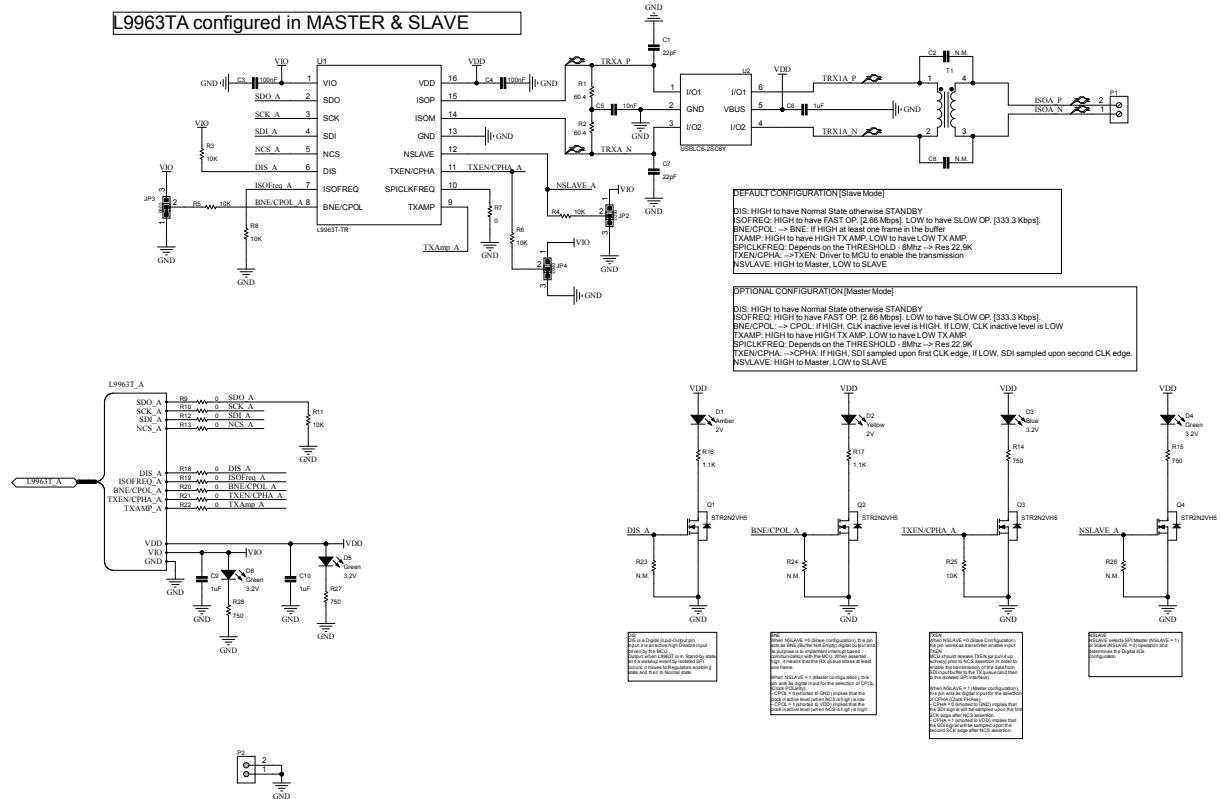
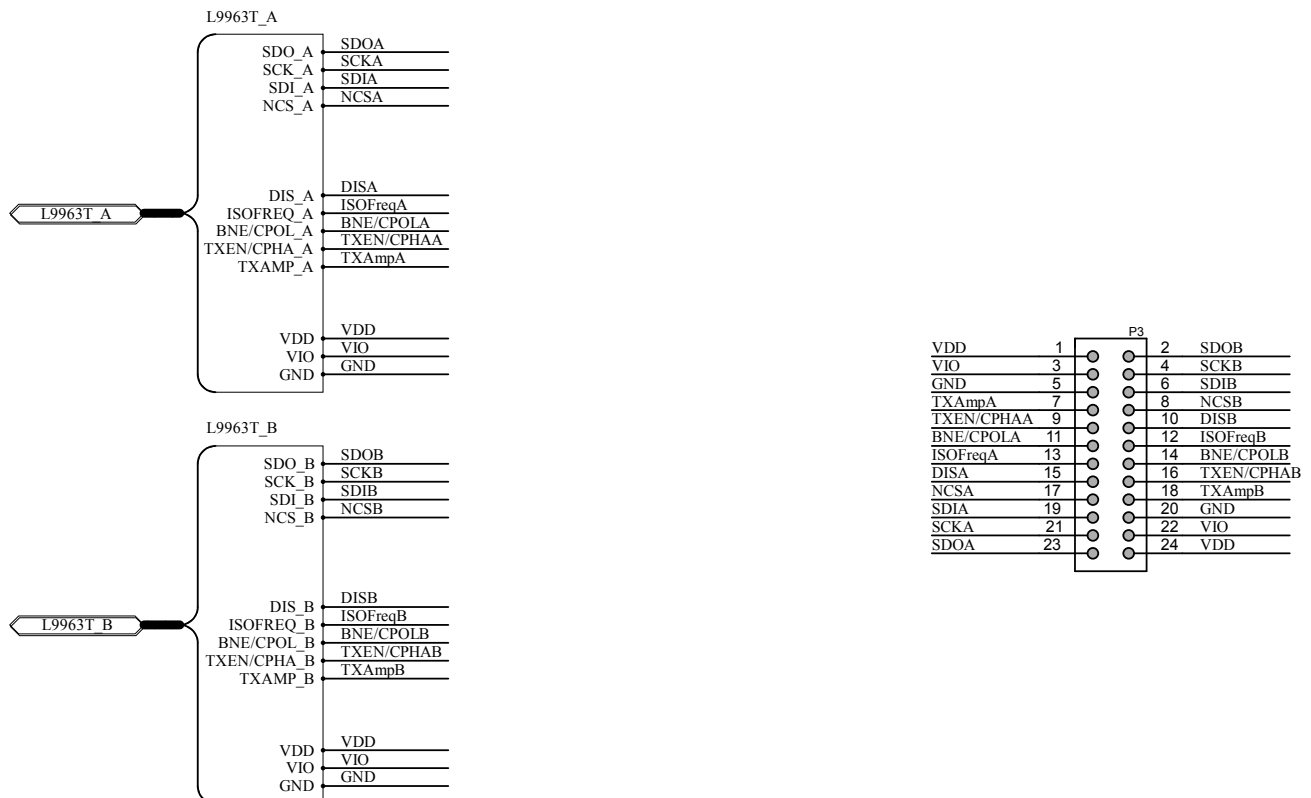


Figure 15. AEK-CON-LTA2 circuit schematic (3 of 3)



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