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1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.

2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.

3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

J171 MLB_A

LAST_MODIFICATION=Mon Mar 25 03:44:29 2019

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| 24 | 26 | IO: BUTTON FLEX CONN / HES | J171/MLB_B | 10/24/2018 |
| 25 | 27 | CAMERA: FF AND ALS CONN | J171/MLB_B | 10/24/2018 |
| 26 | 29 | CAMERA: REAR CONN & FILTERS | J171/MLB_B | 10/24/2018 |
| 27 | 30 | TOUCH: KONA #1 | J71B_MLB_B1 | 07/23/2018 |
| 28 | 31 | TOUCH: KONA #2 | J171/MLB_B | 10/24/2018 |
| 29 | 32 | TOUCH: CONNS | J71B_MLB_B1 | 07/23/2018 |
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| 48 | 121 | POWER: ALIASES | J171/MLB_B | 10/24/2018 |

| PART# | QTY | DESCRIPTION | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|-----------|-----|---------------------|-------------------------|----------|------------|
| 051-04464 | 1 | SCHEM,MLB-A,YN,J171 | SCH1 | CRITICAL | |
| 820-01686 | 1 | PCBF,MLB-A,YN,J171 | PCB1 | CRITICAL | |


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SYNC_DATE=11/06/2016

DRAWING TITLE

SCHEM,MLB-A,YN,J171

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051-04464

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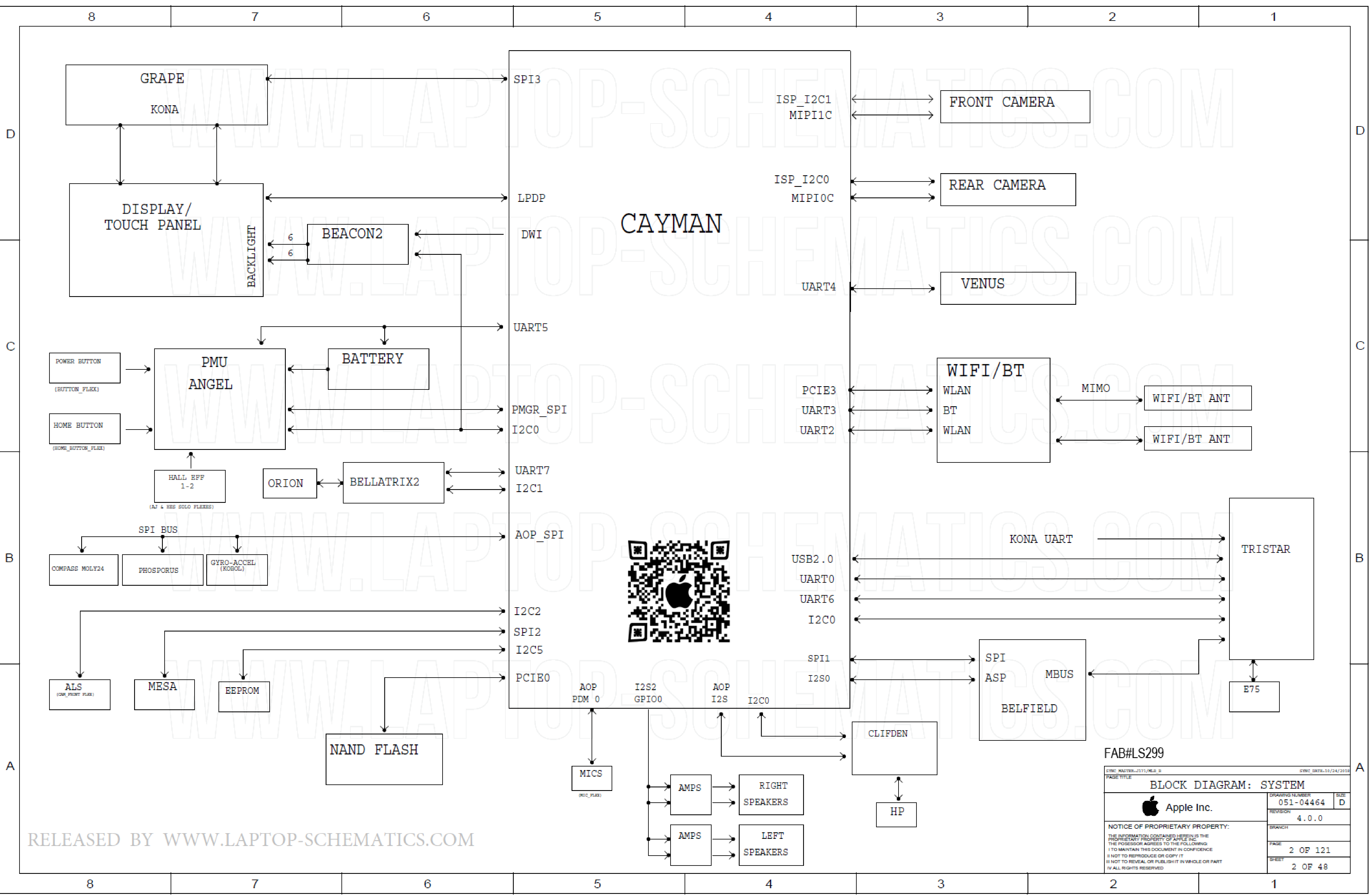
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www.RepairLap.com

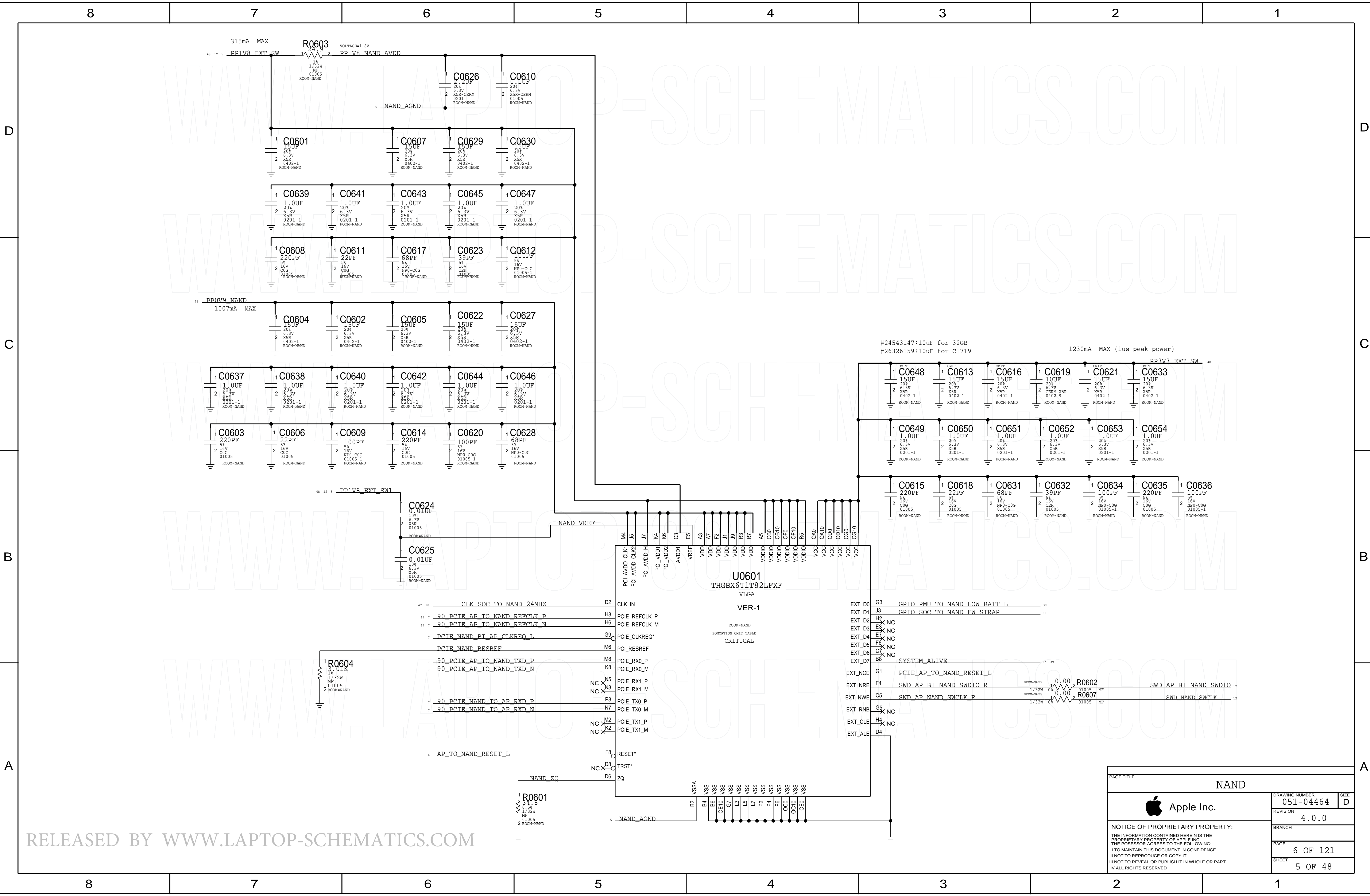


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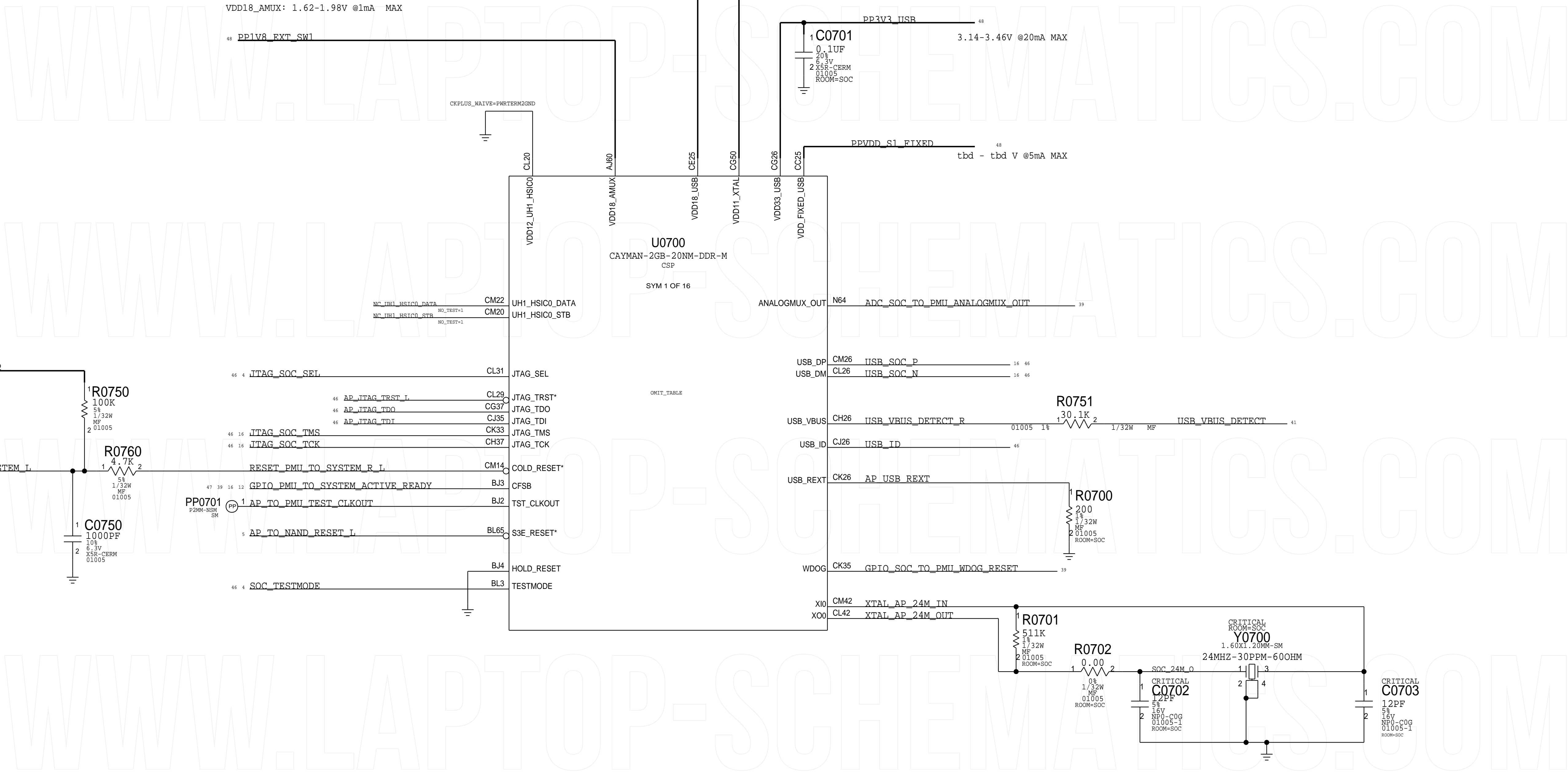
VDD18_USB: 1.71-1.89V @20mA MAX


PP1V8_EXT_SW1

C0700
0.1uF
20%
X5R-CERM
610DPS
ROOM=SOC

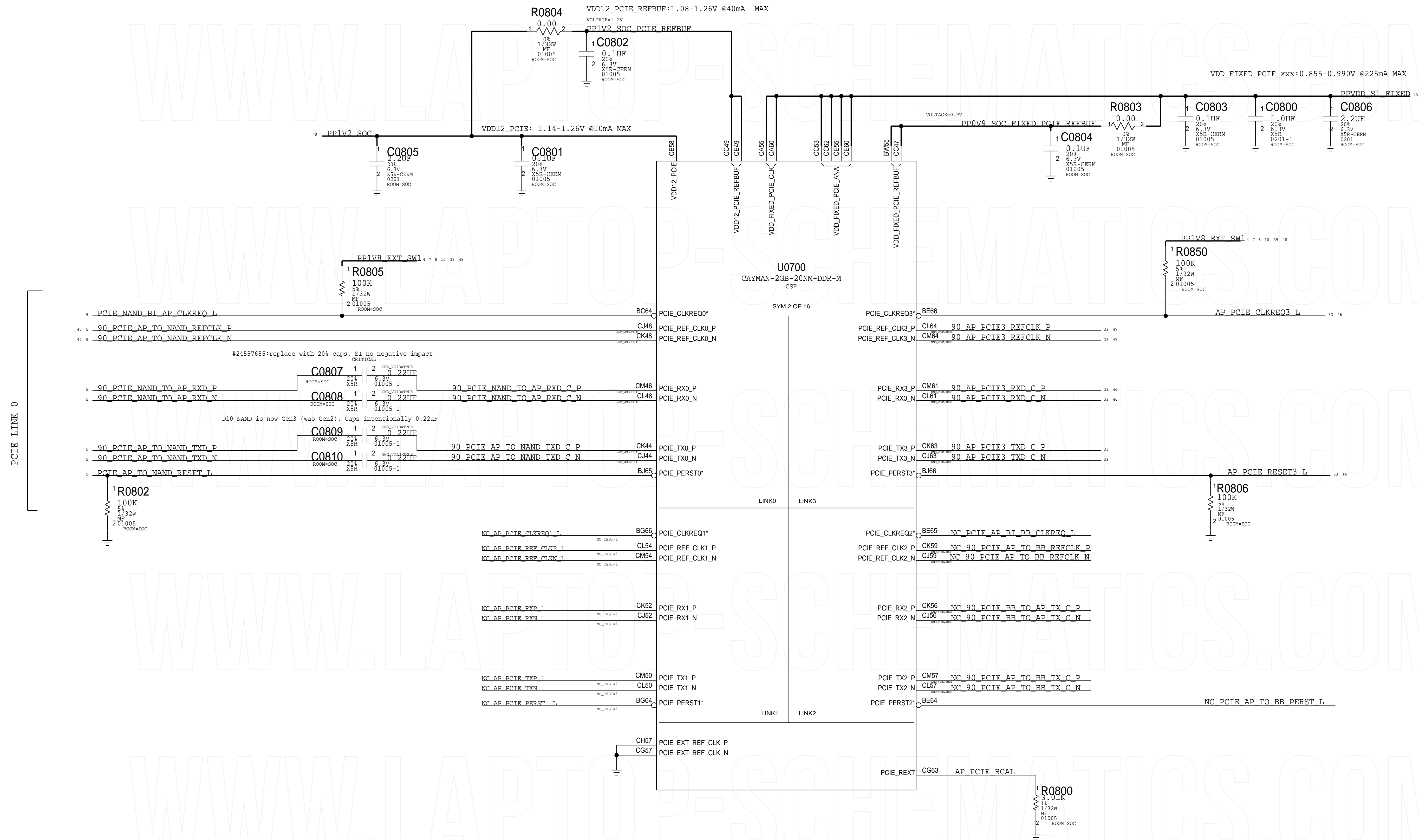
FL0700
240-OHM-25%-0.20A-1.0DCR

VDD11_XTAL: 1.06-1.17V @TBD mA MAX




| | | | |
|--|----------------|----------|------|
| PAGE TITLE | | | |
| SOC: JTAG, USB, XTAL | | | |
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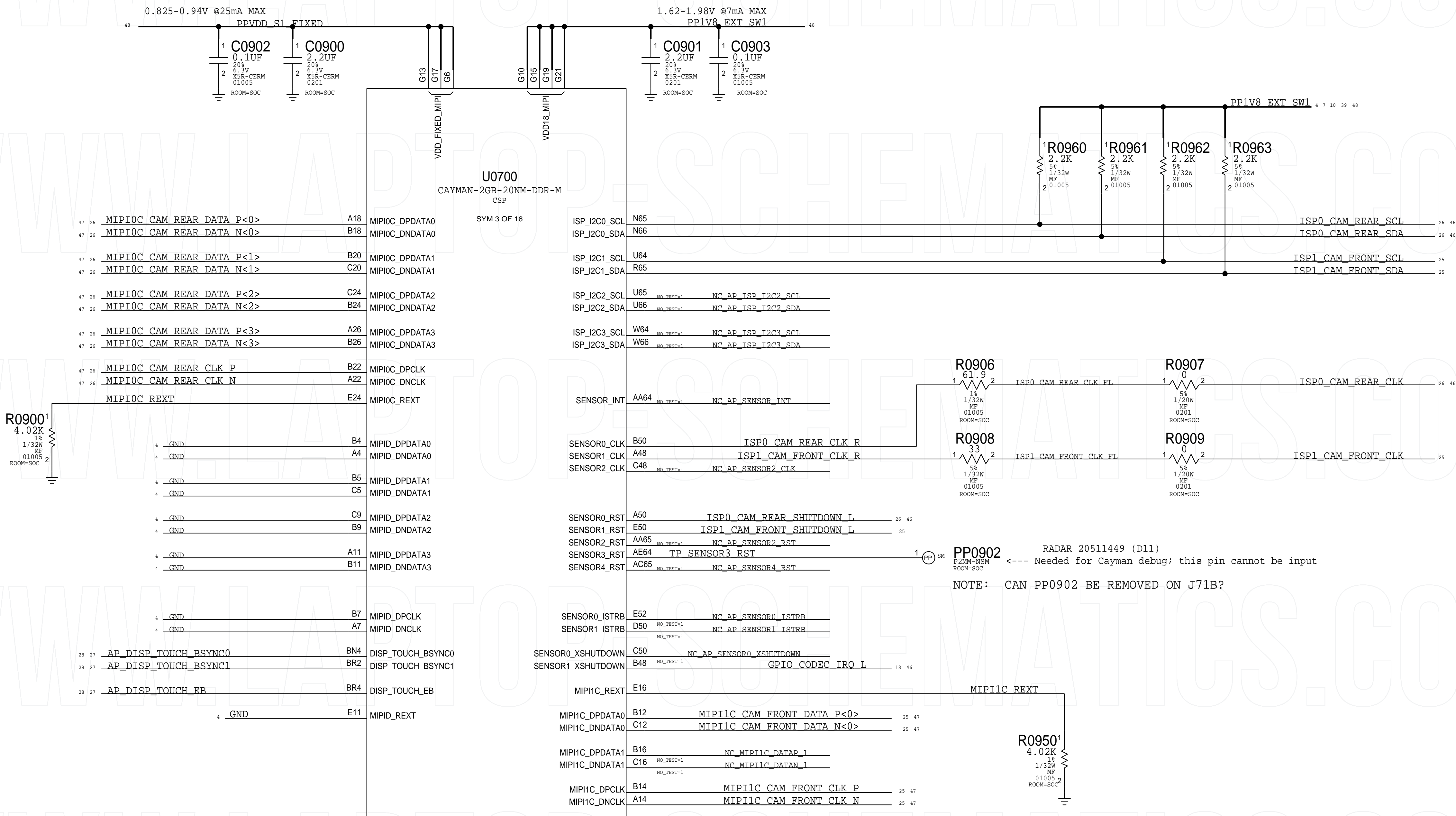
SOC - PCIE INTERFACES




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| SOC:PCIE | | | |
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SOC - MIPI & ISP INTERFACES



TO BE REVIEWED

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| SOC:MIPI AND ISP | | |
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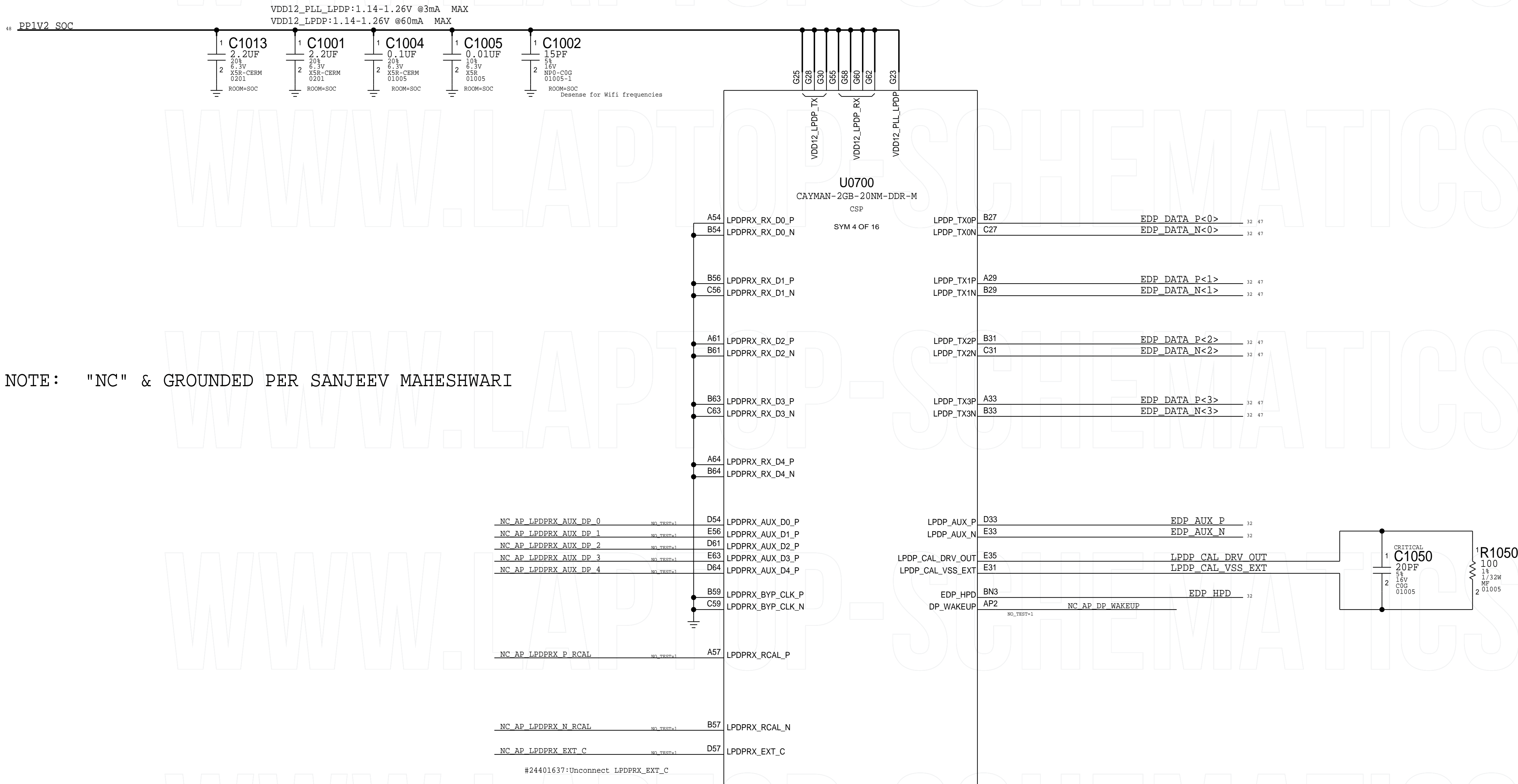
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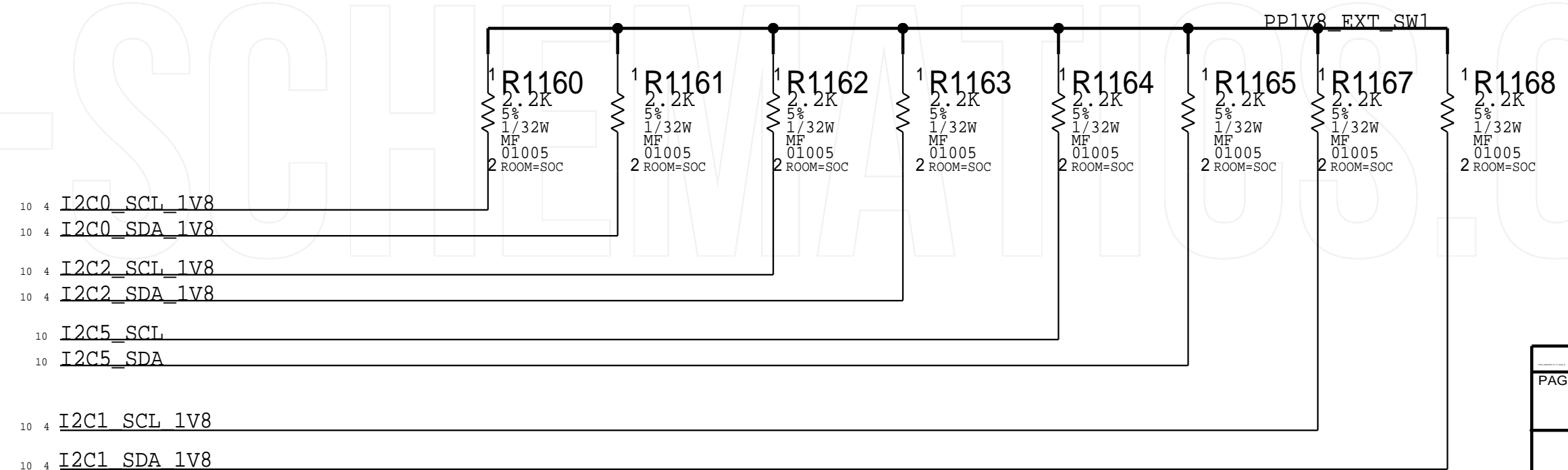
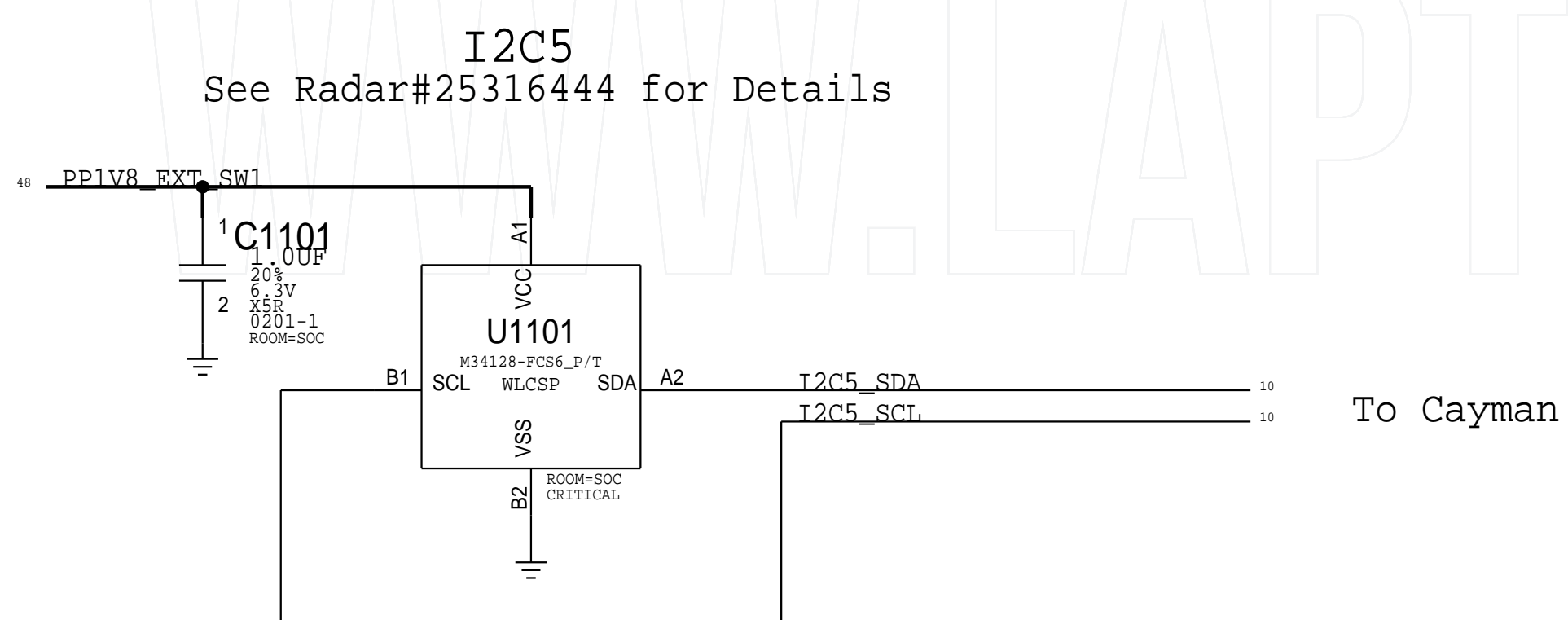
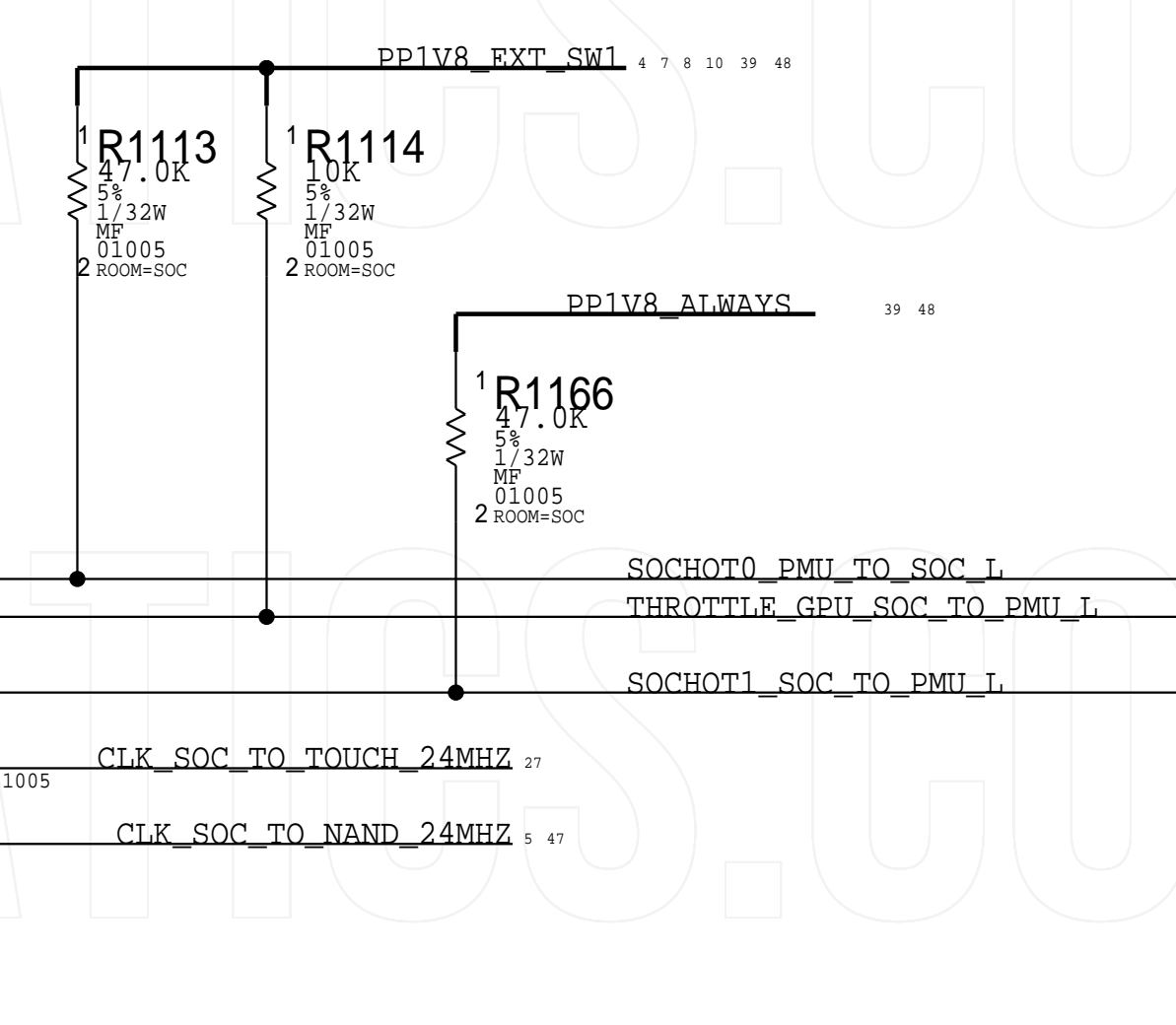
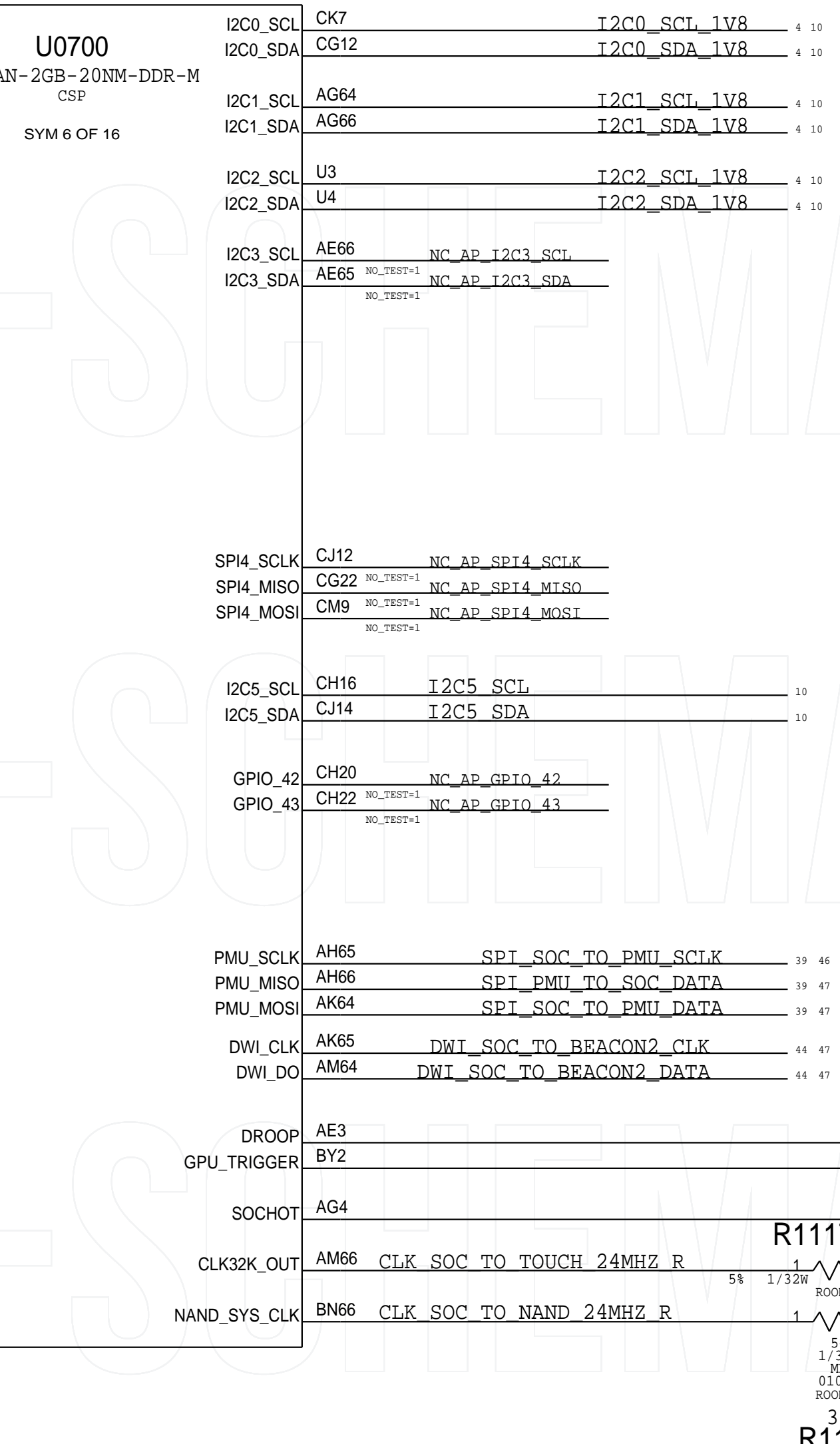
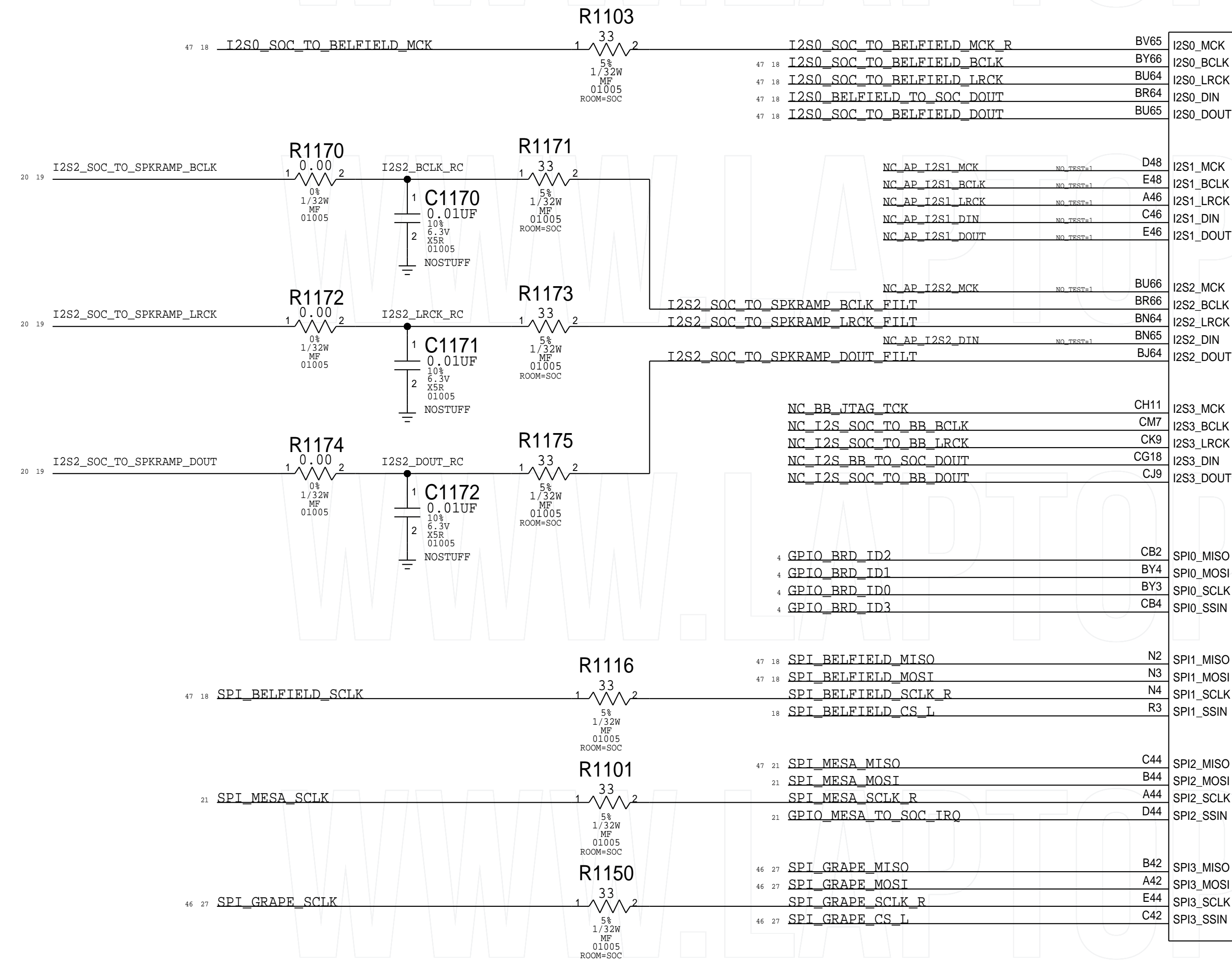
NOTE: D11 GROUNDED VDD12_LPDP_TX



NOTE: "NC" & GROUNDED PER SANJEEV MAHESHWARI

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| SOC:LPDP | | |
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SOC - SERIAL INTERFACES



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SOC - GPIO INTERFACES

| | | |
|-----------------------|---------------------------------|------------------|
| U0700 | | |
| CAYMAN-2GB-20NM-DDR-M | | |
| CSP | | |
| SYM 5 OF 16 | | |
| 20 19 | AUD_SPKRAMP_MODE_L | BB64 GPIO_0 |
| 46 27 | GPIO_GRAPE_IRQ_L | BC65 GPIO_1 |
| | NC_AP_GPIO2 | BB66 GPIO_2 |
| 46 33 33 | GPIO_SOC2WLAN_PCTE_DEV_WAKE | AY65 GPIO_3 |
| | NC_AP_GPIO4 | AY66 GPIO_4 |
| 46 18 | GPIO_SOC2CODEC_RST_L | AV65 GPIO_5 |
| | NC_AP_GPIO6 | AV67 GPIO_6 |
| 25 | GPIO_ALS1_IRQ_L | AT67 GPIO_7 |
| 39 16 | GPIO_TS_TO_SOC_TO_PMU_IRQ | AT66 GPIO_8 |
| 42 | GPIO_SOC_TO_IVR_TOUCH_EXT_SW_ON | AT64 GPIO_9 |
| | NC_AP_GPIO10 | AP66 GPIO_10 |
| 46 28 27 | GPIO_GRAPE_RST_L | AP65 GPIO_11 |
| 39 | GPIO_PMIU_TO_SOC_IRQ_L | AH64 GPIO_12 |
| 4 | GPIO_BRD_REV0 | AE4 GPIO_13 |
| 4 | GPIO_BRD_REV1 | AC3 GPIO_14 |
| 4 | GPIO_BRD_REV2 | AE2 GPIO_15 |
| 46 33 28 27 | GPIO_SOC_TO_BT_TOUCH_TS_SYNC | BB2 GPIO_16 |
| | GPIO_BRD_REV3 | BB4 GPIO_17 |
| 4 | GPIO_BOOT_CFG0 | BC3 GPIO_18 |
| | NC_AP_GPIO19 | BC4 GPIO_19 |
| 34 | GPIO_SOC_TO_ROTTERDAM_DWLD_REQ | BE2 GPIO_20 |
| 34 | GPIO_SOC_TO_ROTTERDAM_DEV_WAKE | BE4 GPIO_21 |
| | NC_AP_GPIO22 | BE3 GPIO_22 |
| | NC_AP_GPIO23 | BG2 GPIO_23 |
| | NC_AP_GPIO24 | CJ11 GPIO_24 |
| 4 | GPIO_BOOT_CFG1 | CL9 GPIO_25 |
| 46 39 | GPIO_FORCE_DEFU | CH14 GPIO_26 |
| 46 | TP_GPIO_DEFU_STATUS | CK11 GPIO_27 |
| 4 | GPIO_BOOT_CFG2 | CG20 GPIO_28 |
| 4 | GPIO_BRD_ID4 | AA2 GPIO_29 |
| | NC_AP_GPIO30 | AA3 GPIO_30 |
| | NC_AP_GPIO31 | D42 GPIO_31 |
| 4 | GPIO_SOC_TO_NAND_FW_STRAP | E42 GPIO_32 |
| 46 35 | GPIO_SOC2BT_WAKE | A41 GPIO_33 |
| 24 | GPIO_BTN_VOL_DOWN_L | C41 GPIO_34 |
| 24 | GPIO_BTN_VOL_UP_L | E41 GPIO_35 |
| | NC_AP_GPIO36 | A39 GPIO_36 |
| | NC_AP_GPIO37 | AT4 GPIO_37 |
| | NC_AP_GPIO38 | AT2 GPIO_38 |
| | NC_AP_GPIO39 | AV3 GPIO_39 |
| | NC_AP_GPIO40 | AY2 GPIO_40 |
| | NC_AP_GPIO41 | AY3 GPIO_41 |
| 47 39 | PMU_TO_AP_BUE_BTN_ONOFF_L | BU2 REQUEST_DFU1 |
| 47 39 | PMU_TO_AP_BUE_BTN_HOME_L | BU3 REQUEST_DFU2 |

TMR32_PWM0

TMR32_PWM1

TMR32_PWM2

UART0_RXD

UART0_TXD

UART1_CTS

UART1_RTS

UART1_RXD

UART1_TXD

UART2_CTS

UART2_RTS

UART2_RXD

UART2_TXD

UART3_CTS

UART3_RTS

UART3_RXD

UART3_TXD

UART4_CTS

UART4_RTS

UART4_RXD

UART4_TXD

UART5_RTXD

UART6_RXD

UART6_TXD

UART7_RXD

UART7_TXD

AG2 GPIO_SOC_TO_3V3_TOUCH_EXT_SW_ON

AH4 GPIO_SOC_TO_BELFIELD_RESET_L

AH3 WLAN_TIME_SYNC

CL5 UART_DEBUG_TO_SOC_TX

CJ7 UART_SOC_TO_DEBUG_TX

E39 NC_UART_GNSS_TO_AP_RTS_L

D39 NC_UART_AP_TO_GNSS_RTS_L

C39 NC_UART_GNSS_TO_AP_TXD

B39 NC_UART_AP_TO_GNSS_TXD

AM4 UART2_WLAN2SOC_RTS_L

AK3 UART2_SOC2WLAN_RTS_L

AK4 UART2_WLAN2SOC_TX

AH2 UART2_SOC2WLAN_TX

AA4 UART_BT2SOC_RTS_L

W2 UART_SOC2BT_RTS_L

W4 UART_BT2SOC_TX

U2 UART_SOC2BT_TX

D37 UART_ROTTERDAM_TO_SOC_RTS_L

C37 UART_SOC_TO_ROTTERDAM_RTS_L

B37 UART_ROTTERDAM_TO_SOC_TX

A37 UART_SOC_TO_ROTTERDAM_TX


BG4 UART5_BATT_RTXD

CG16 UART_ACC_TO_SOC_TX

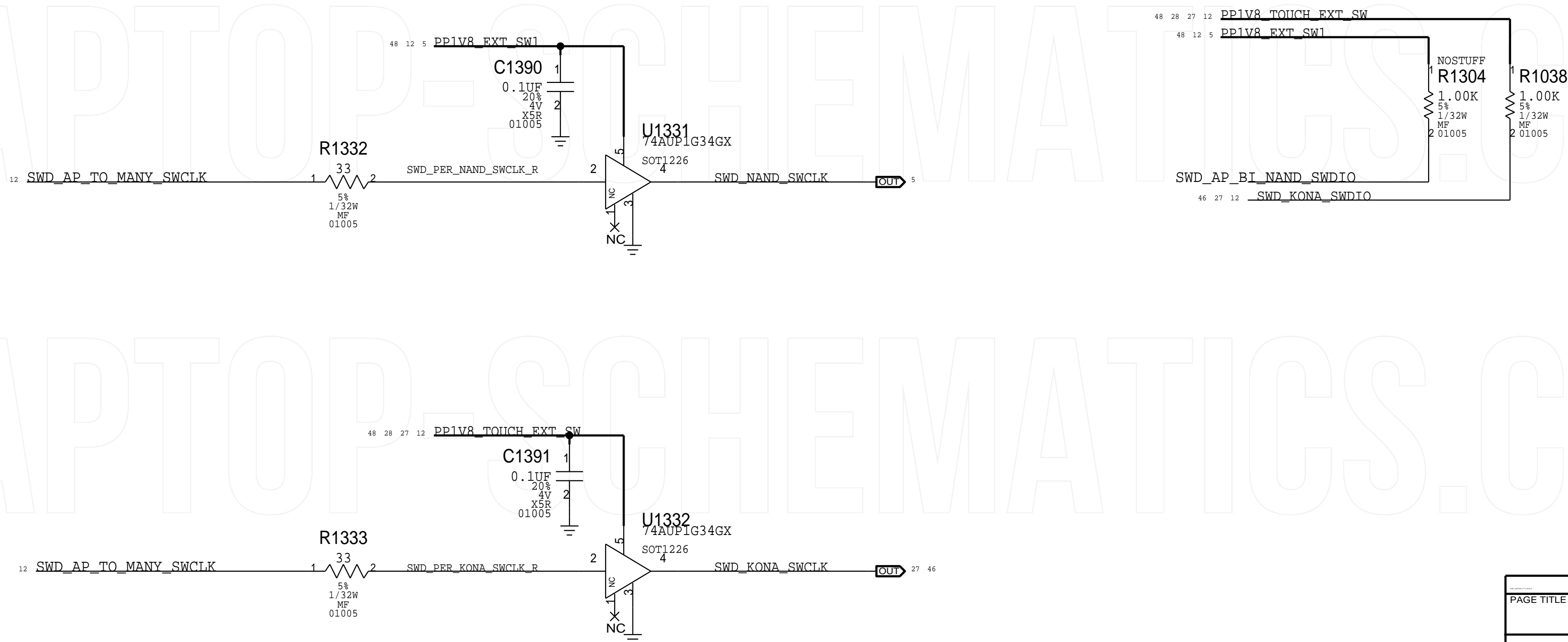
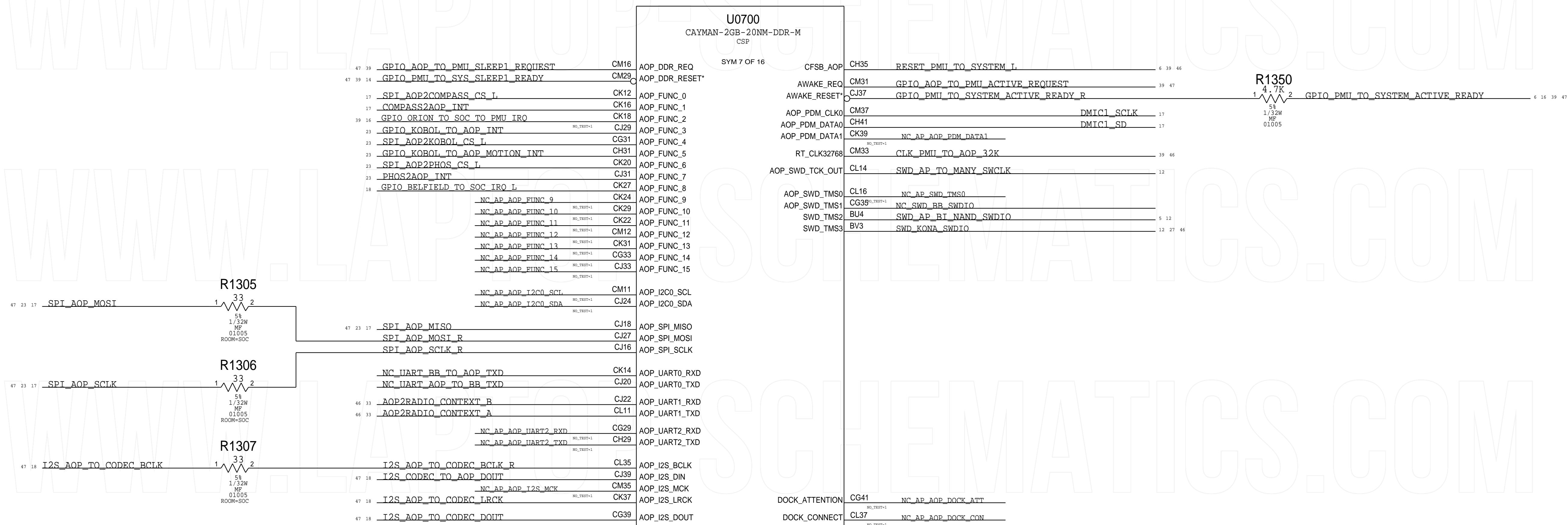
CG14 UART_SOC_TO_ACC_TX


AP3 UART_BELLATRIX2_TO_SOC_TX

AM2 UART_SOC_TO_BELLATRIX2_TX

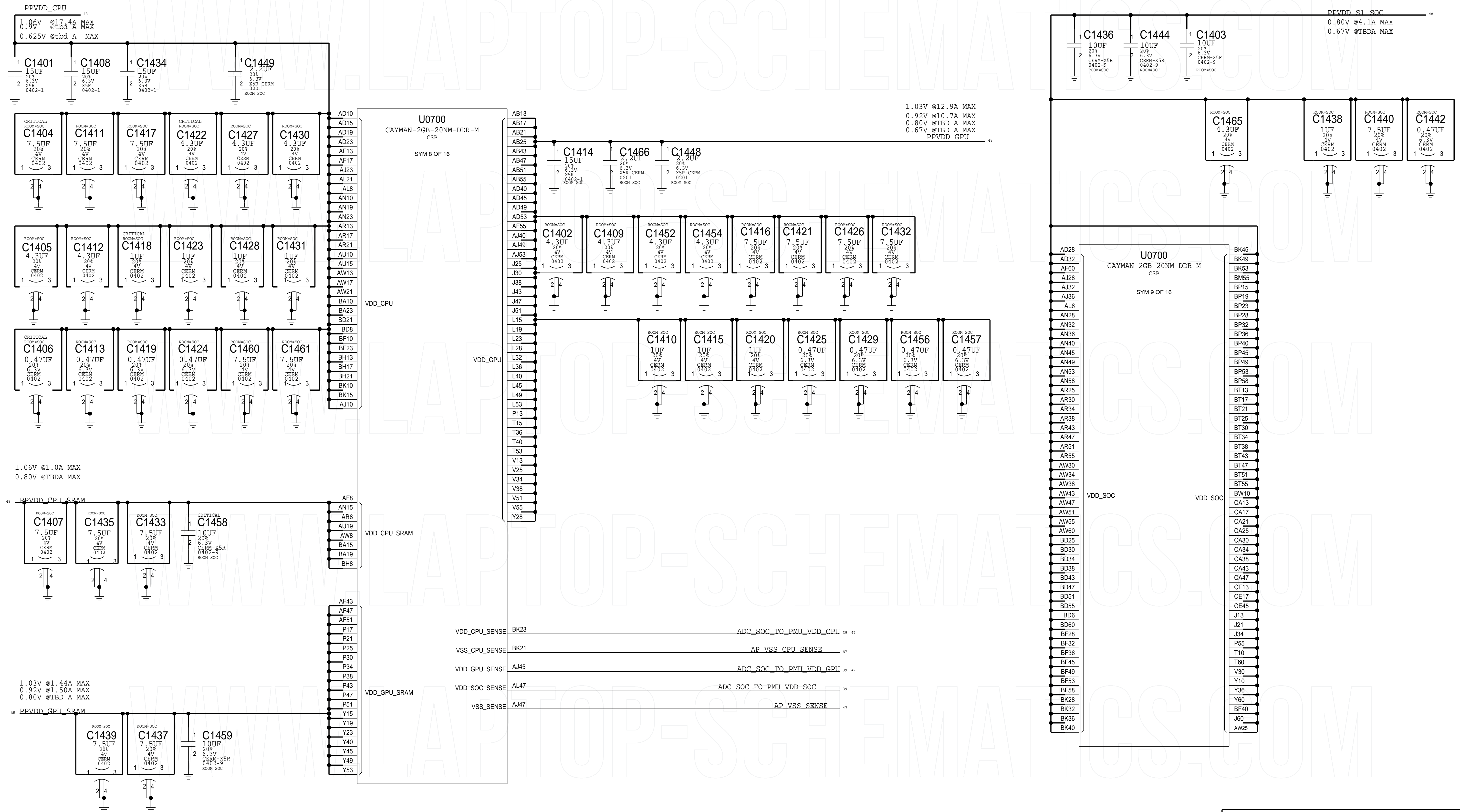
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SOC - AOP

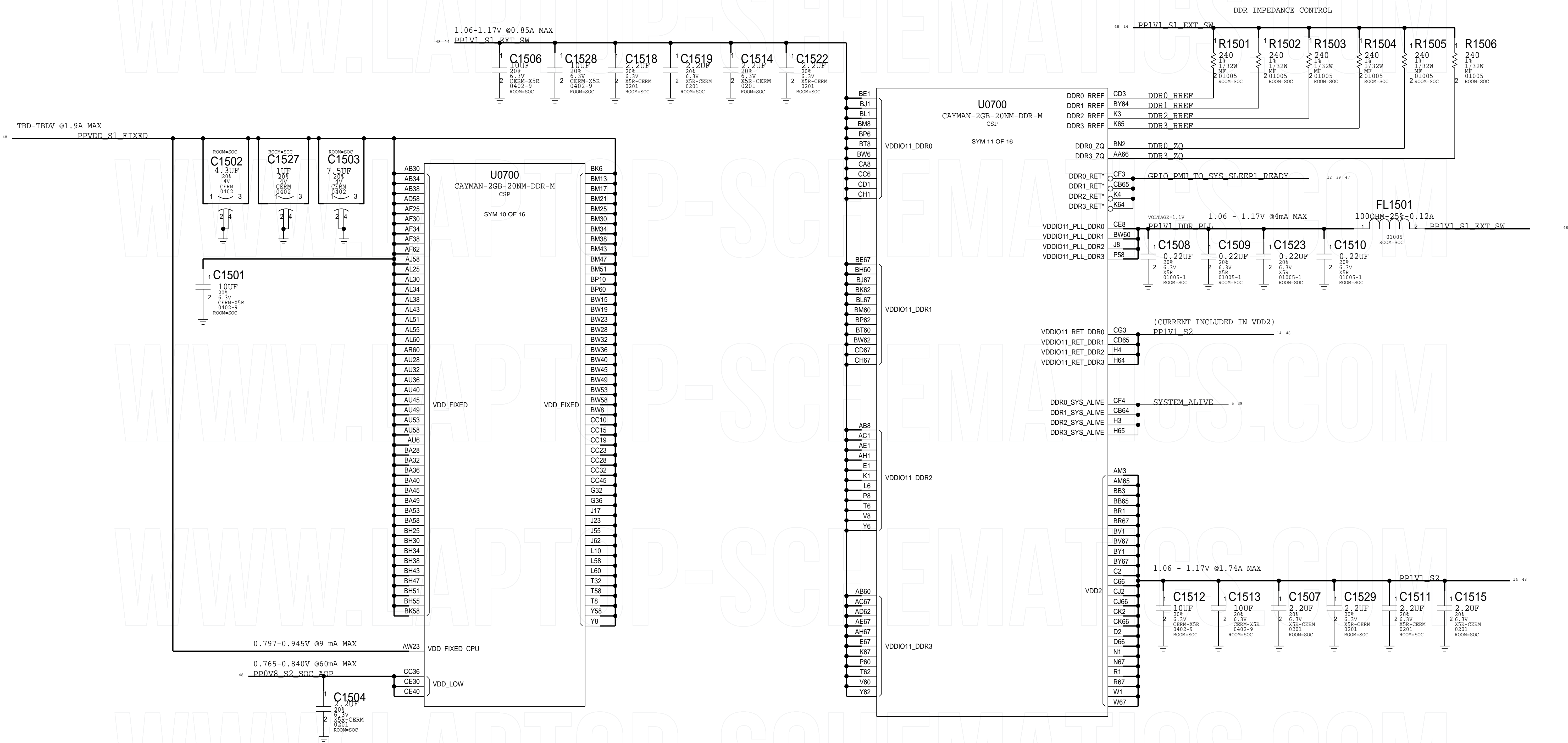


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SOC - CPU, GPU & SOC RAILS



SOC - POWER SUPPLIES

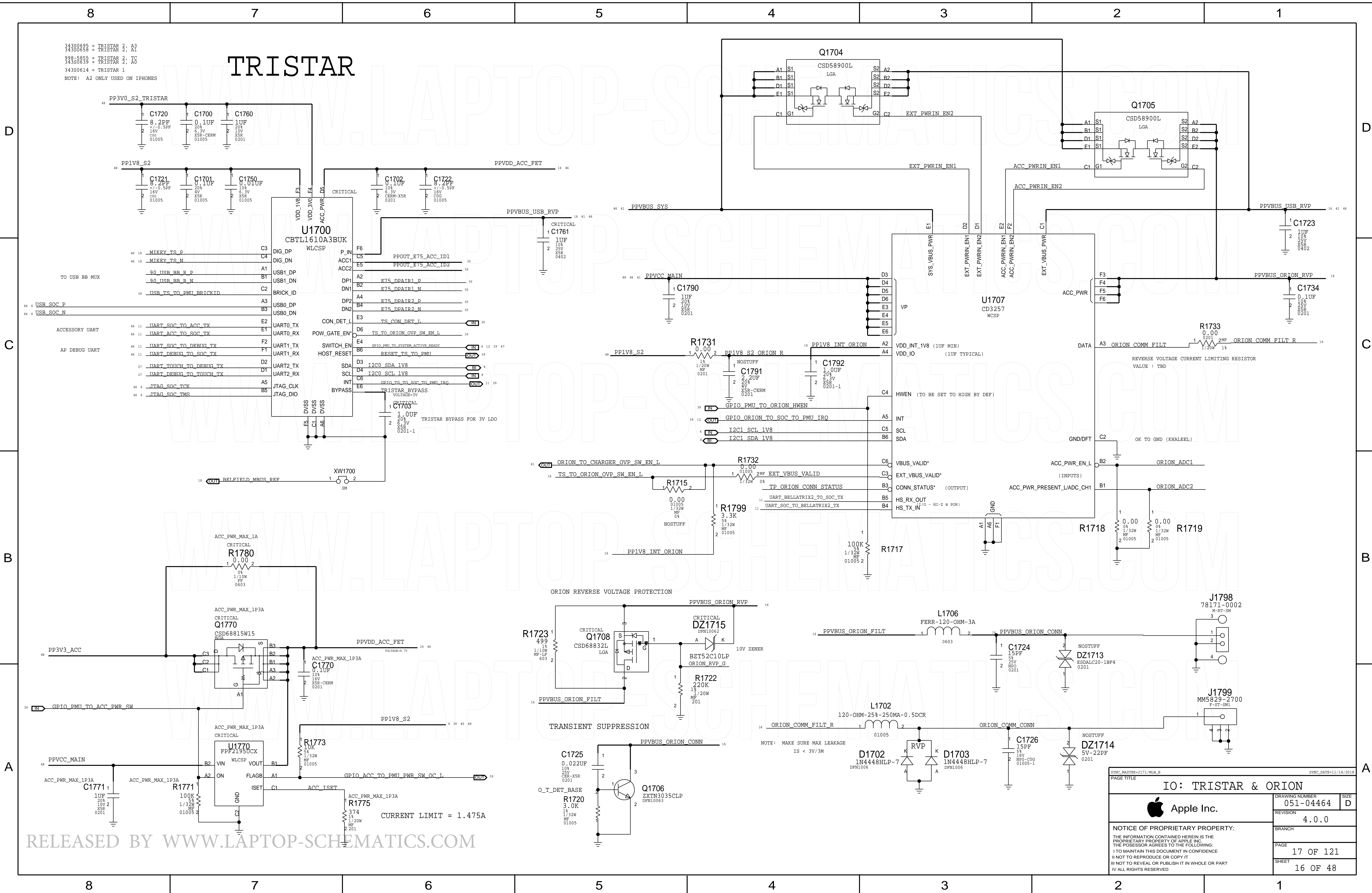


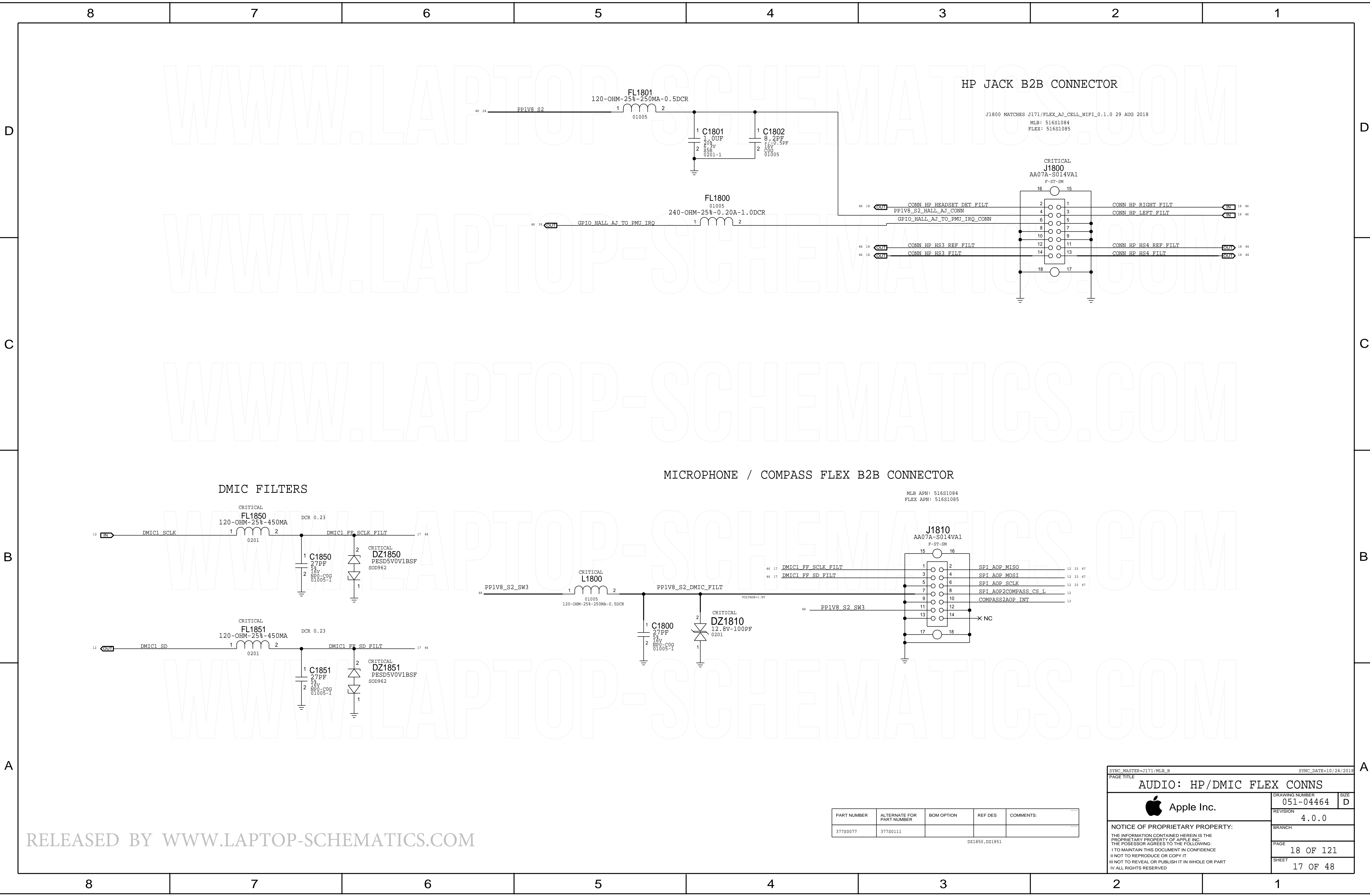
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SOC - POWER SUPPLIES

The diagram illustrates the power supply architecture for a System-on-Chip (SOC). It features four U0700 chips, each labeled 'CAYMAN-2GB-20NM-DDR-M CSP'. The chips are arranged in a 2x2 grid, with pins labeled A12 through AK67. The power distribution network includes several voltage regulators and decoupling capacitors. Key components include:

- U0700 Chips:** Four chips, each with a unique pinout (e.g., A12, A16, A2, A20, A24, A27, A31, A35, A5, A52, A56, A59, A63, A66, A9, AA1, AA67, AB10, AB15, AB19, AB23, AB28, AB32, AB36, AB40, AB45, AB49, AB53, AB58, AB6, AB62, AC2, AC4, AC64, AC66, AD13, AD17, AD21, AD25, AD30, AD34, AD43, AD47, AD51, AD55, AD60, AD8, AF10, AF15, AF19, AF23, AF28, AF32, AF36, AF40, AF45, AF49, AF53, AF58, AF6, AG1, AG3, AG65, AG67, AJ21, AJ25, AJ30, AJ34, AJ38, AJ43, AL10, AL51, AJ55, AJ8, AK1, AK2, AK66, AK67).
- Power Regulators:** C1601, C1602, C1603, C1604, C1605, C1606, C1607, C1608, C1609, C1610, C1611, C1612, C1613, C1614, C1615, C1616, C1617, C1618, C1619, C1620, C1621, C1622, C1623, C1624, C1625, C1626, C1627, C1628, C1629, C1630, C1631, C1632, C1633, C1634, C1635, C1636, C1637, C1638, C1639, C1640, C1641, C1642, C1643, C1644, C1645, C1646, C1647, C1648, C1649, C1650, C1651, C1652, C1653, C1654, C1655, C1656, C1657, C1658, C1659, C1660, C1661, C1662, C1663, C1664, C1665, C1666, C1667, C1668, C1669, C1670, C1671, C1672, C1673, C1674, C1675, C1676, C1677, C1678, C1679, C1680, C1681, C1682, C1683, C1684, C1685, C1686, C1687, C1688, C1689, C1690, C1691, C1692, C1693, C1694, C1695, C1696, C1697, C1698, C1699, C1700, C1701, C1702, C1703, C1704, C1705, C1706, C1707, C1708, C1709, C1710, C1711, C1712, C1713, C1714, C1715, C1716, C1717, C1718, C1719, C1720, C1721, C1722, C1723, C1724, C1725, C1726, C1727, C1728, C1729, C1730, C1731, C1732, C1733, C1734, C1735, C1736, C1737, C1738, C1739, C1740, C1741, C1742, C1743, C1744, C1745, C1746, C1747, C1748, C1749, C1750, C1751, C1752, C1753, C1754, C1755, C1756, C1757, C1758, C1759, C1760, C1761, C1762, C1763, C1764, C1765, C1766, C1767, C1768, C1769, C1770, C1771, C1772, C1773, C1774, C1775, C1776, C1777, C1778, C1779, C1780, C1781, C1782, C1783, C1784, C1785, C1786, C1787, C1788, C1789, C1790, C1791, C1792, C1793, C1794, C1795, C1796, C1797, C1798, C1799, C1800, C1801, C1802, C1803, C1804, C1805, C1806, C1807, C1808, C1809, C1810, C1811, C1812, C1813, C1814, C1815, C1816, C1817, C1818, C1819, C1820, C1821, C1822, C1823, C1824, C1825, C1826, C1827, C1828, C1829, C1830, C1831, C1832, C1833, C1834, C1835, C1836, C1837, C1838, C1839, C1840, C1841, C1842, C1843, C1844, C1845, C1846, C1847, C1848, C1849, C1850, C1851, C1852, C1853, C1854, C1855, C1856, C1857, C1858, C1859, C1860, C1861, C1862, C1863, C1864, C1865, C1866, C1867, C1868, C1869, C1870, C1871, C1872, C1873, C1874, C1875, C1876, C1877, C1878, C1879, C1880, C1881, C1882, C1883, C1884, C1885, C1886, C1887, C1888, C1889, C1890, C1891, C1892, C1893, C1894, C1895, C1896, C1897, C1898, C1899, C1900, C1901, C1902, C1903, C1904, C1905, C1906, C1907, C1908, C1909, C1910, C1911, C1912, C1913, C1914, C1915, C1916, C1917, C1918, C1919, C1920, C1921, C1922, C1923, C1924, C1925, C1926, C1927, C1928, C1929, C1930, C1931, C1932, C1933, C1934, C1935, C1936, C1937, C1938, C1939, C1940, C1941, C1942, C1943, C1944, C1945, C1946, C1947, C1948, C1949, C1950, C1951, C1952, C1953, C1954, C1955, C1956, C1957, C1958, C1959, C1960, C1961, C1962, C1963, C1964, C1965, C1966, C1967, C1968, C1969, C1970, C1971, C1972, C1973, C1974, C1975, C1976, C1977, C1978, C1979, C1980, C1981, C1982, C1983, C1984, C1985, C1986, C1987, C1988, C1989, C1990, C1991, C1992, C1993, C1994, C1995, C1996, C1997, C1998, C1999, C2000, C2001, C2002, C2003, C2004, C2005, C2006, C2007, C2008, C2009, C2010, C2011, C2012, C2013, C2014, C2015, C2016, C2017, C2018, C2019, C2020, C2021, C2022, C2023, C2024, C2025, C2026, C2027, C2028, C2029, C2030, C2031, C2032, C2033, C2034, C2035, C2036, C2037, C2038, C2039, C2040, C2041, C2042, C2043, C2044, C2045, C2046, C2047, C2048, C2049, C2050, C2051, C2052, C2053, C2054, C2055, C2056, C2057, C2058, C2059, C2060, C2061, C2062, C2063, C2064, C2065, C2066, C2067, C2068, C2069, C2070, C2071, C2072, C2073, C2074, C2075, C2076, C2077, C2078, C2079, C2080, C2081, C2082, C2083, C2084, C2085, C2086, C2087, C2088, C2089, C2090, C2091, C2092, C2093, C2094, C2095, C2096, C2097, C2098, C2099, C2100, C2101, C2102, C2103, C2104, C2105, C2106, C2107, C2108, C2109, C2110, C2111, C2112, C2113, C2114, C2115, C2116, C2117, C2118, C2119, C2120, C2121, C2122, C2123, C2124, C2125, C2126, C2127, C2128, C2129, C2130, C2131, C2132, C2133, C2134, C2135, C2136, C2137, C2138, C2139, C2140, C2141, C2142, C2143, C2144, C2145, C2146, C2147, C2148, C2149, C2150, C2151, C2152, C2153, C2154, C2155, C2156, C2157, C2158, C2159, C2160, C2161, C2162, C2163, C2164, C2165, C2166, C2167, C2168, C2169, C2170, C2171, C2172, C2173, C2174, C2175, C2176, C2177, C2178, C2179, C2180, C2181, C2182, C2183, C2184, C2185, C2186, C2187, C2188, C2189, C2190, C2191, C2192, C2193, C2194, C2195, C2196, C2197, C2198, C2199, C2200, C2201, C220





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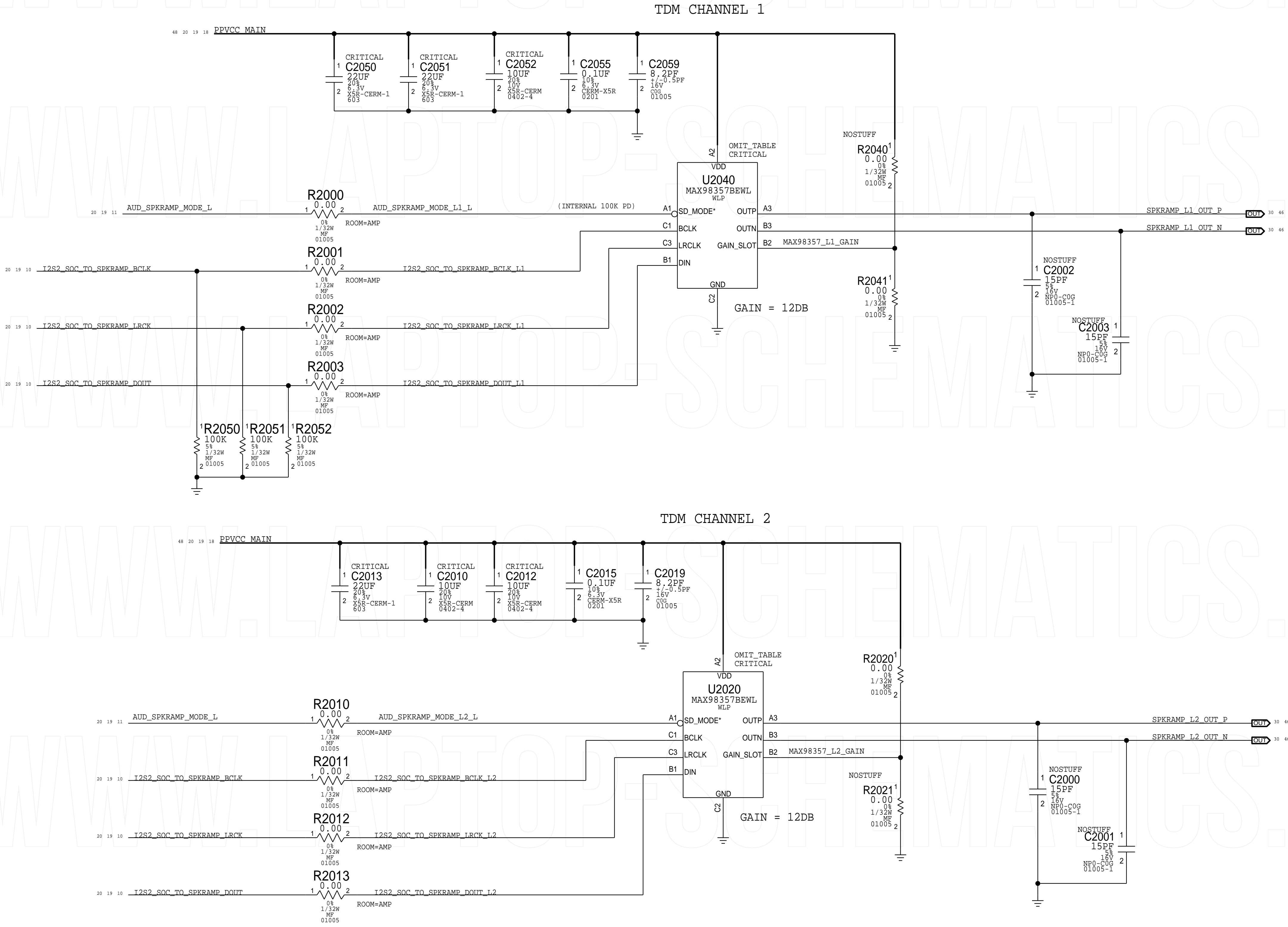
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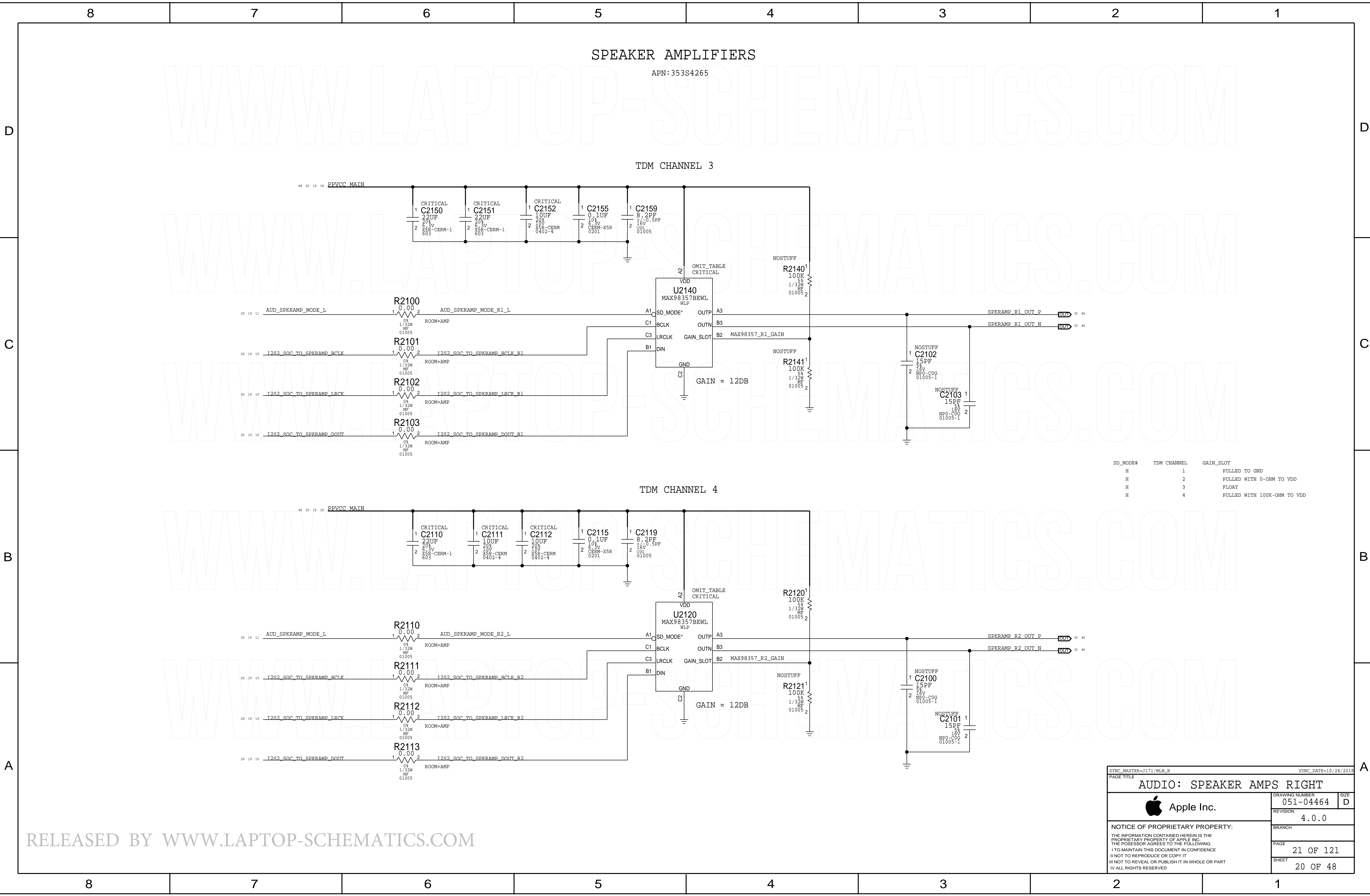
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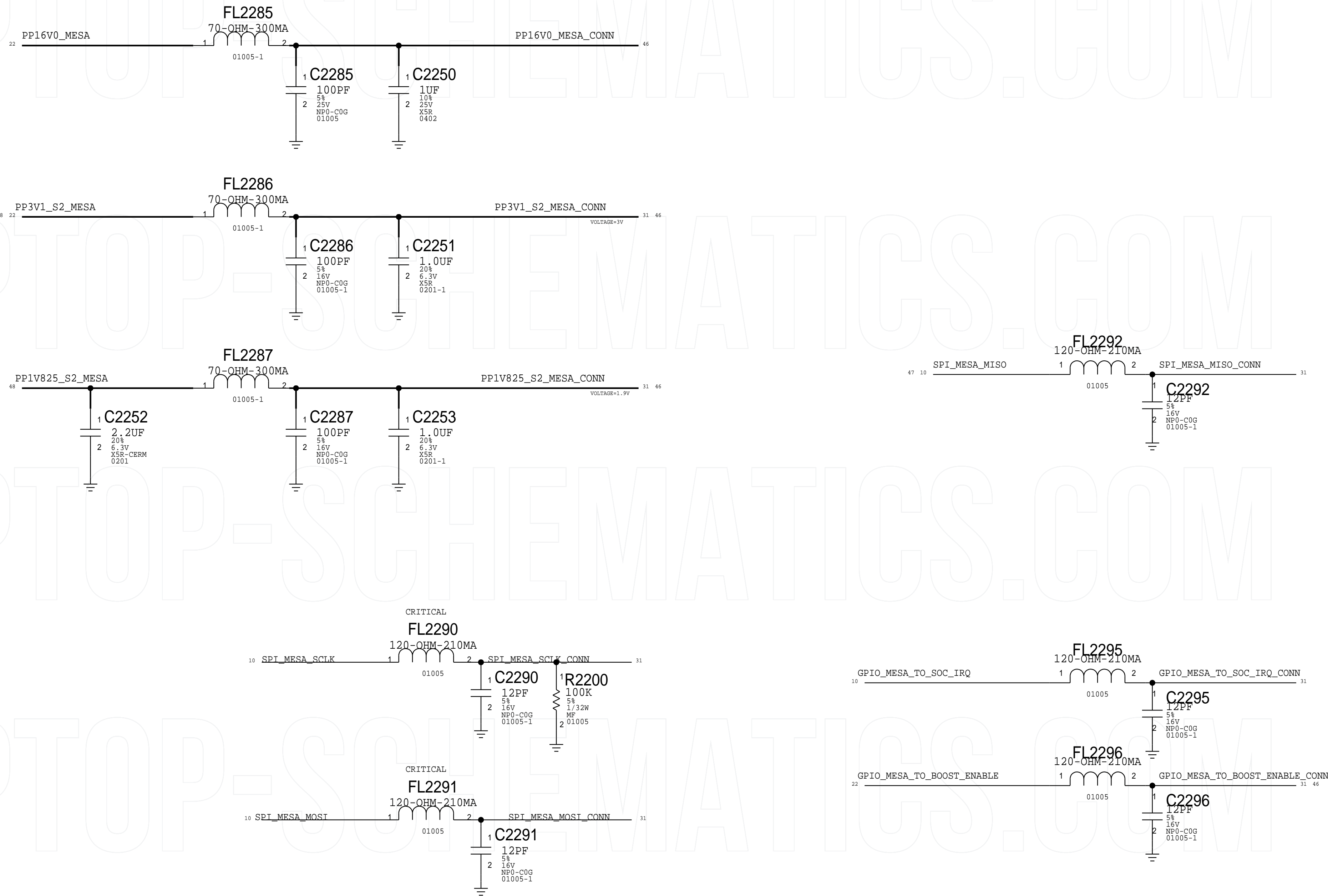
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MESA SUPPORT



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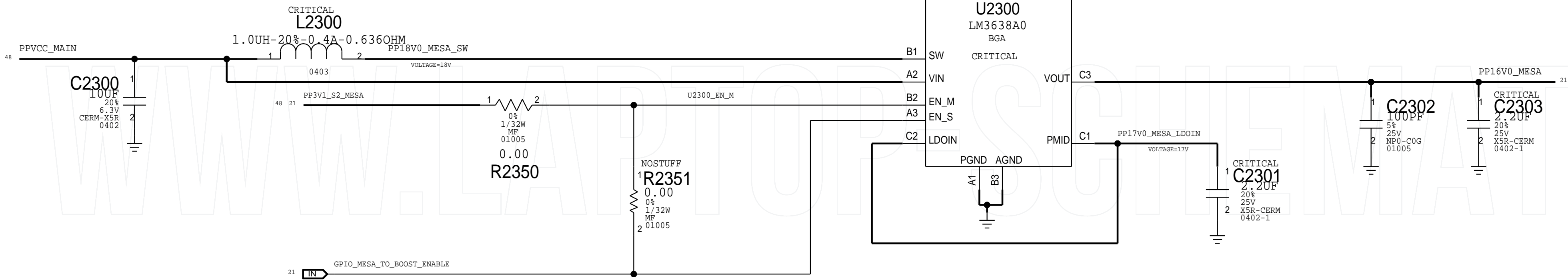
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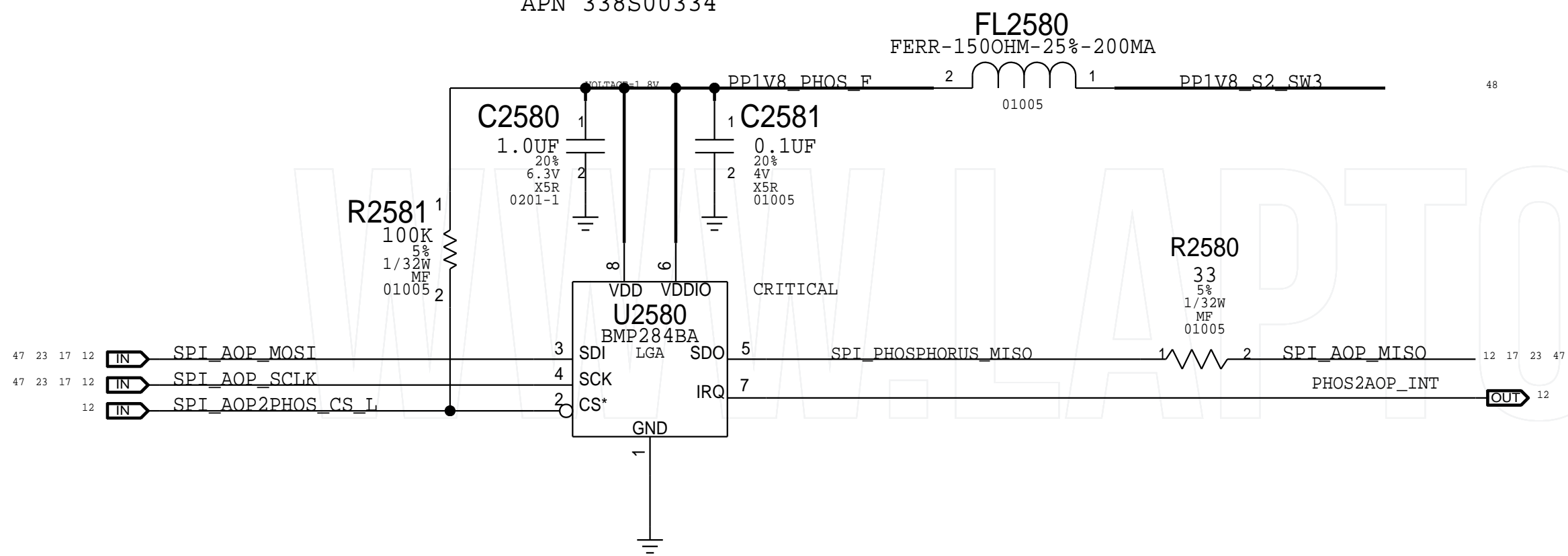


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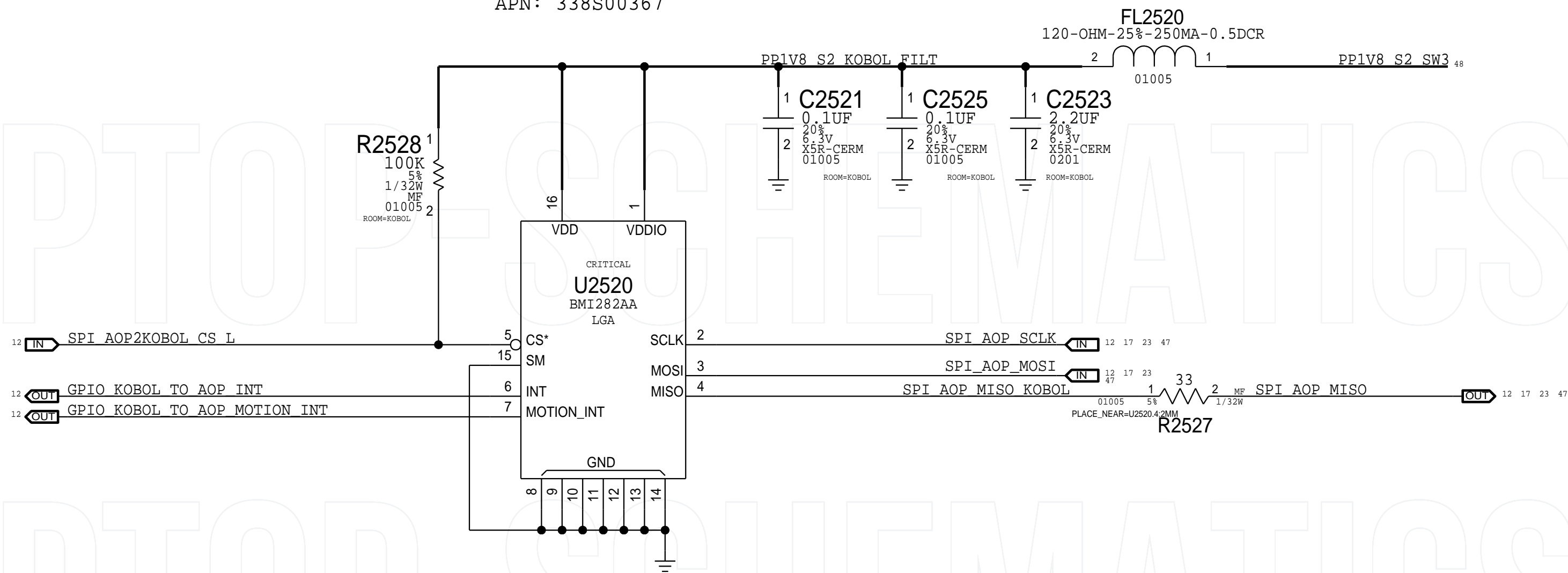
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KOBOL - ACCEL & GYRO

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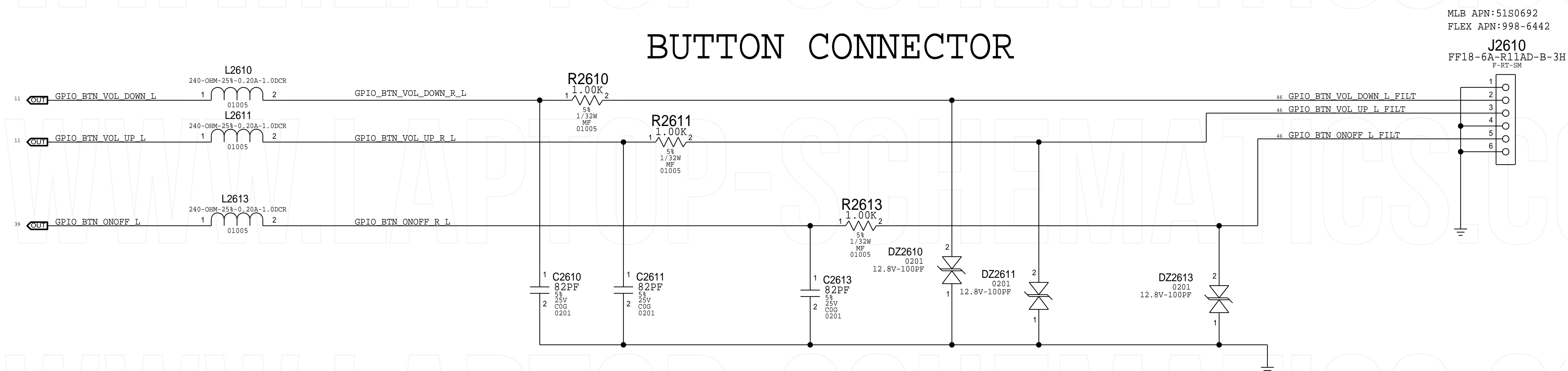


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BUTTON CONNECTOR



HES STANDALONE FLEX CONN

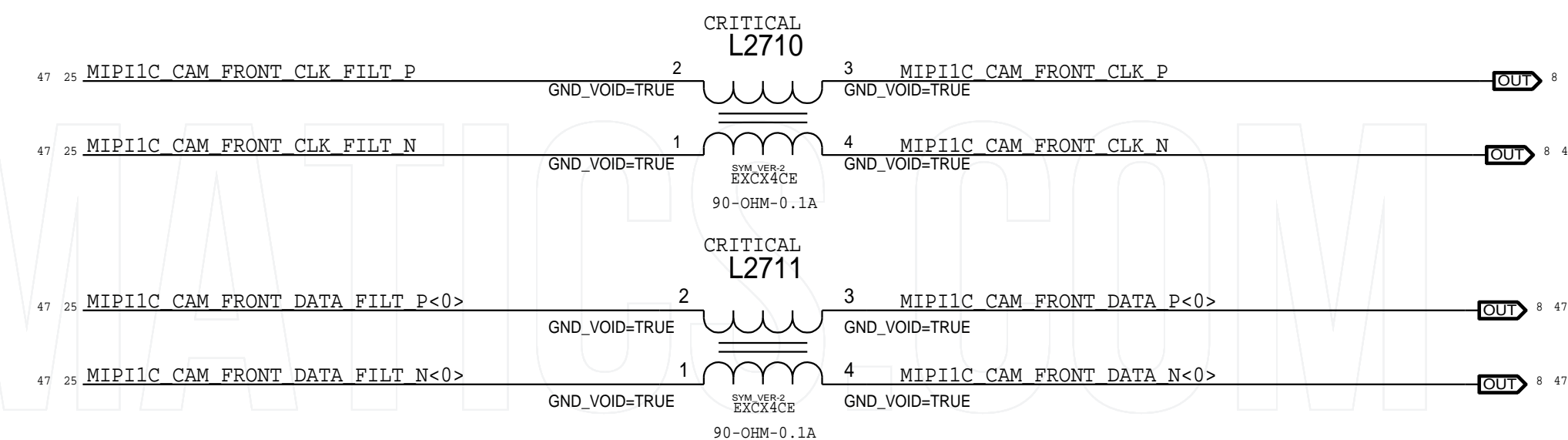
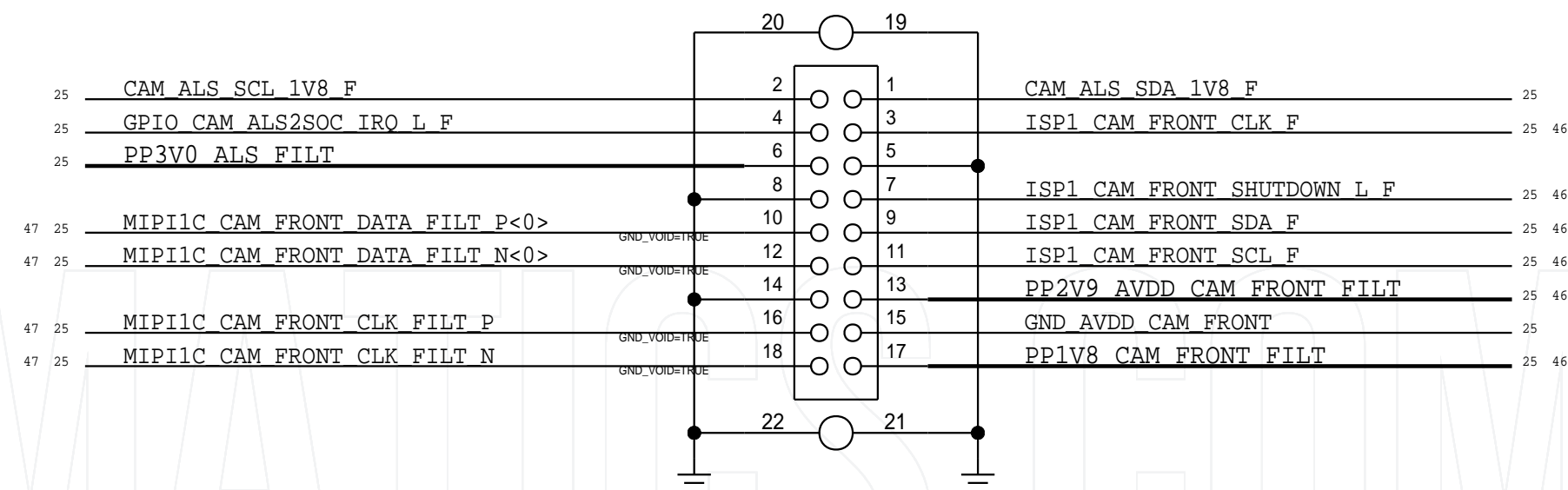
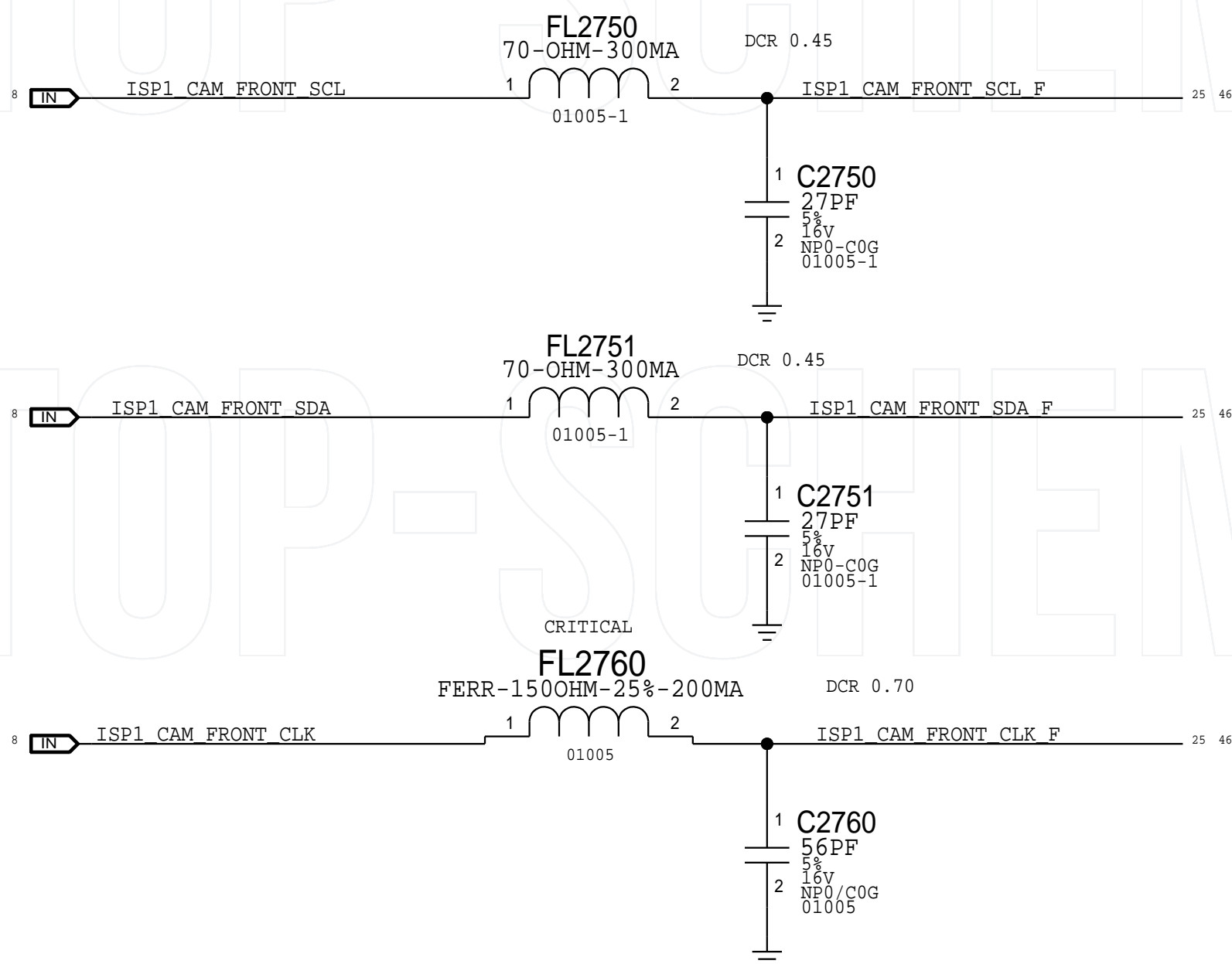
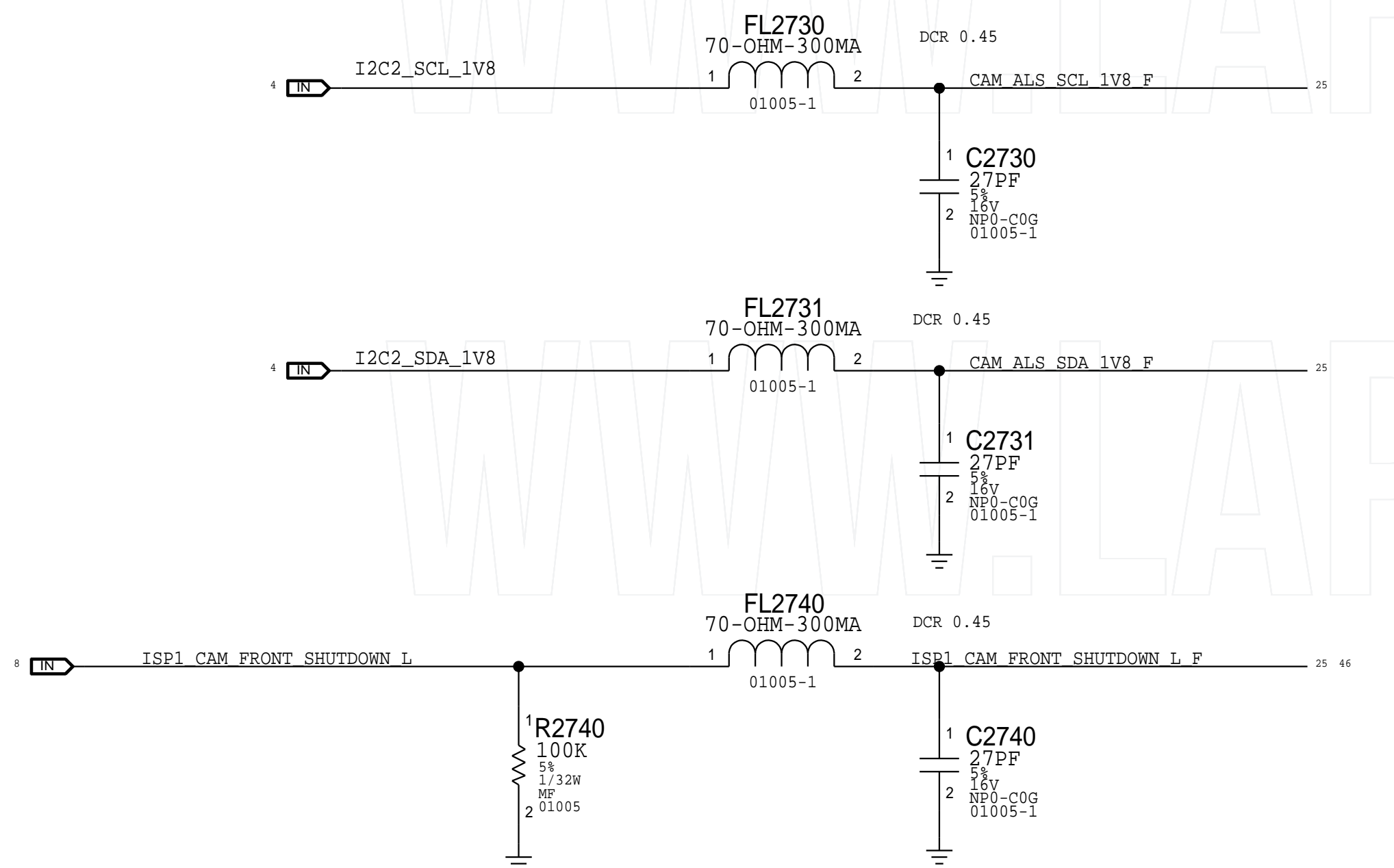
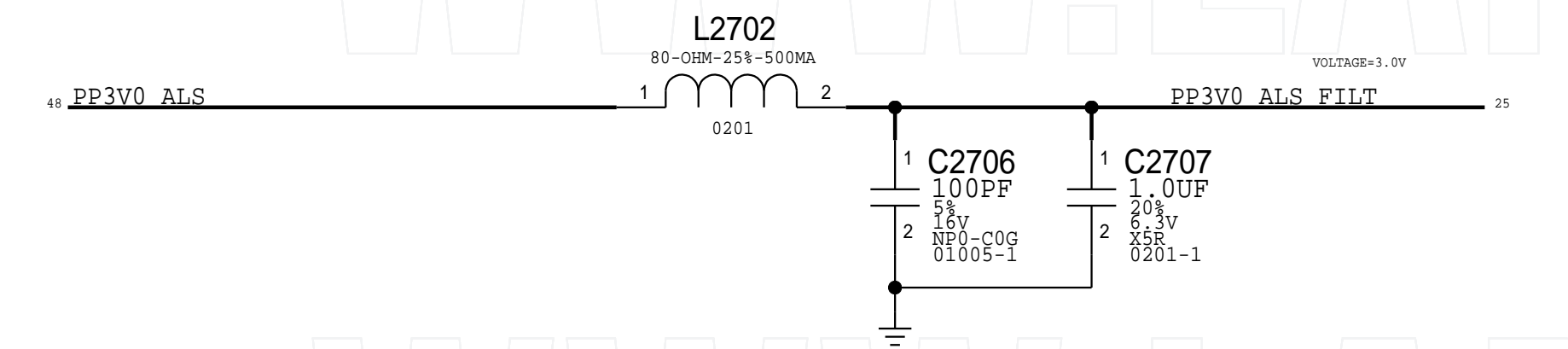
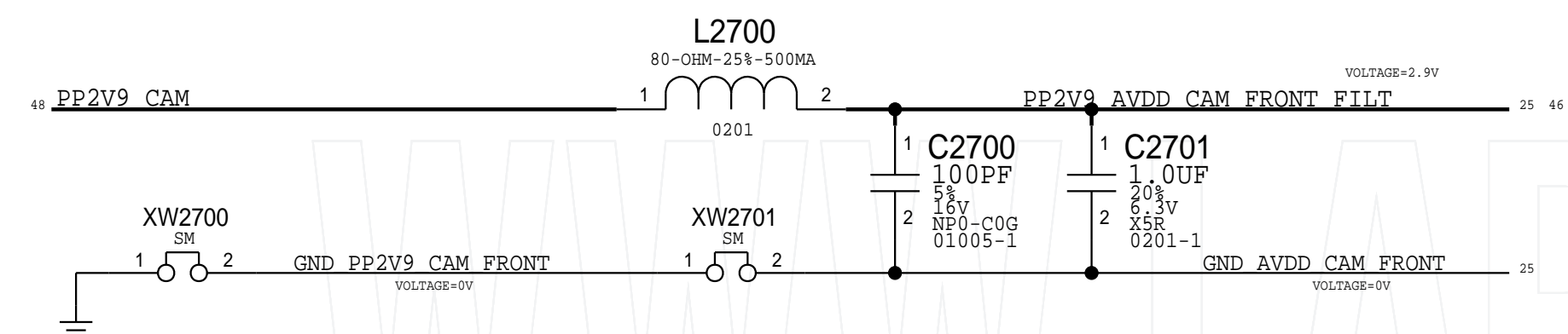
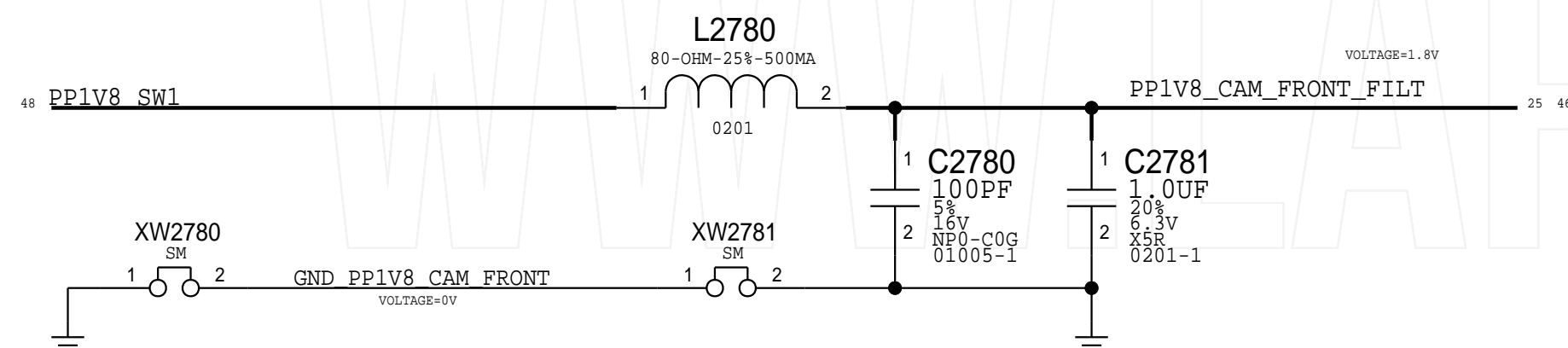


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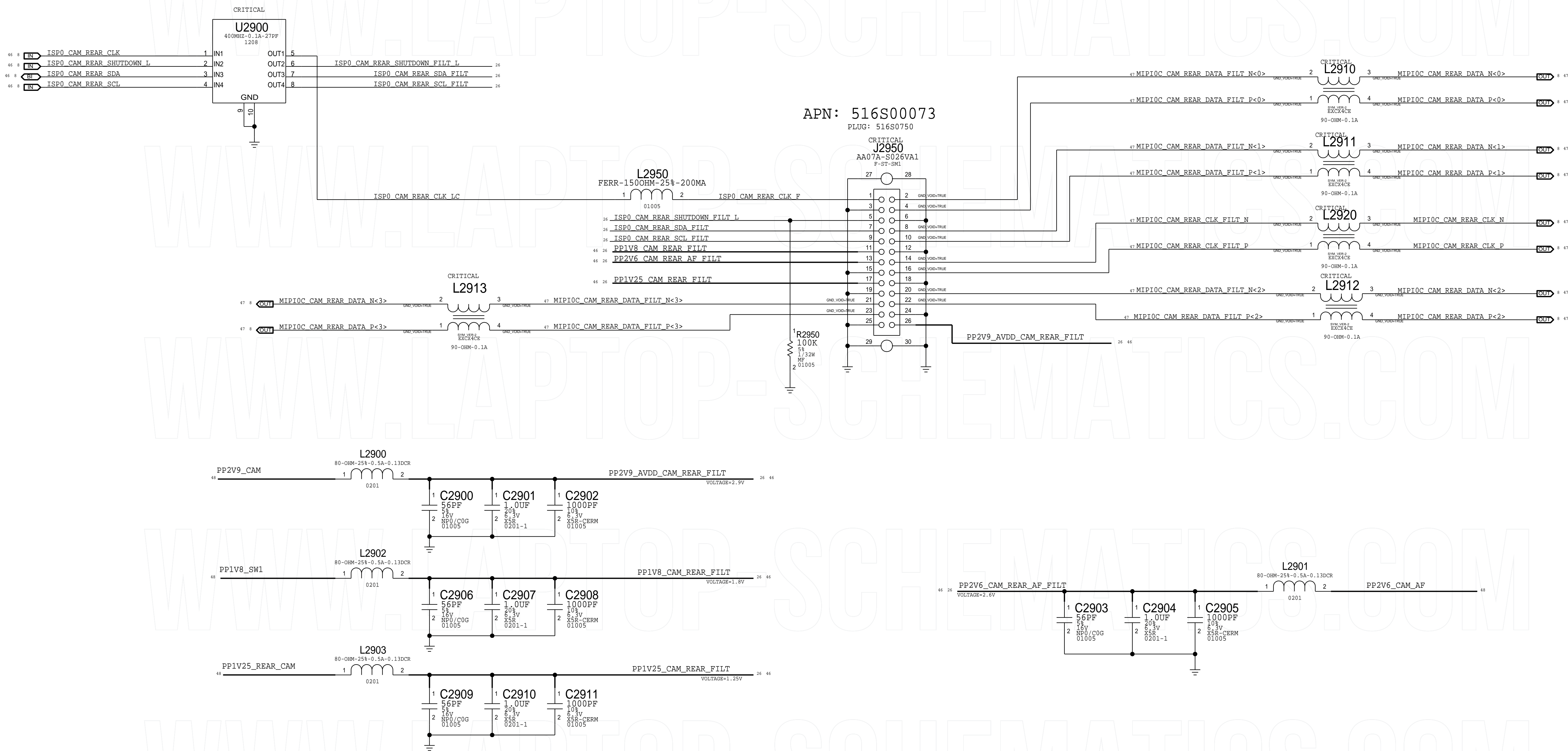
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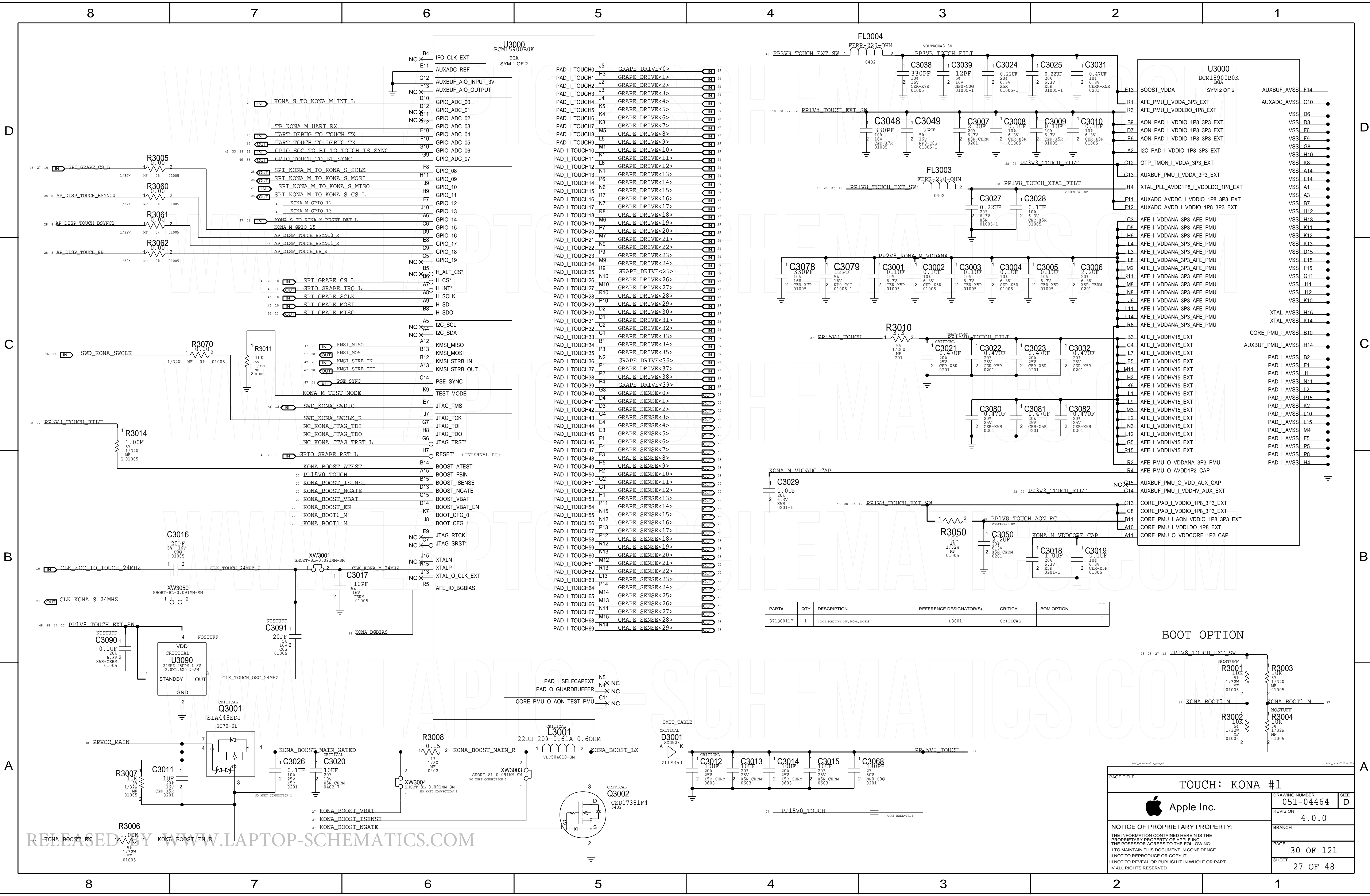
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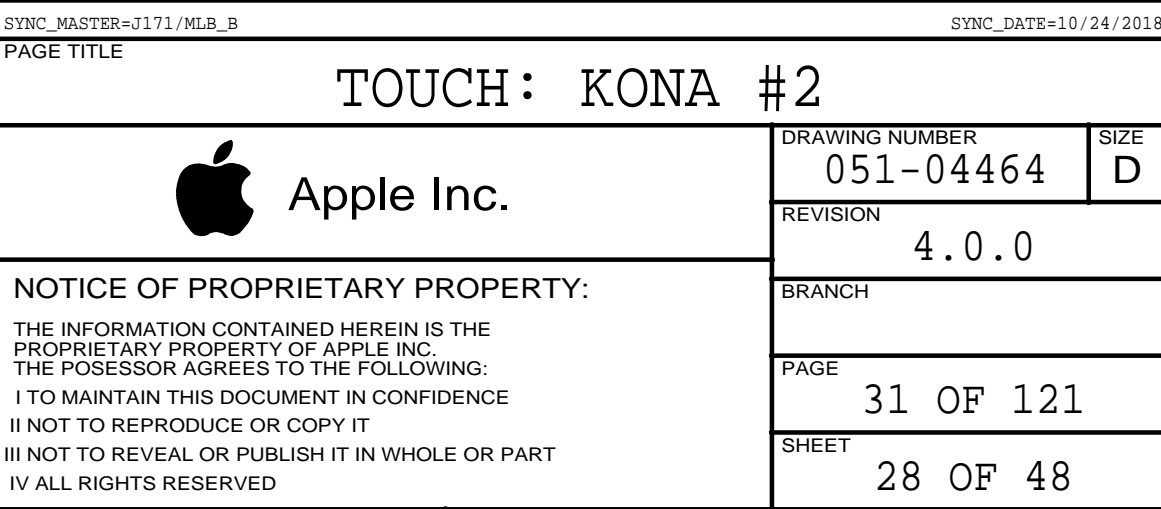
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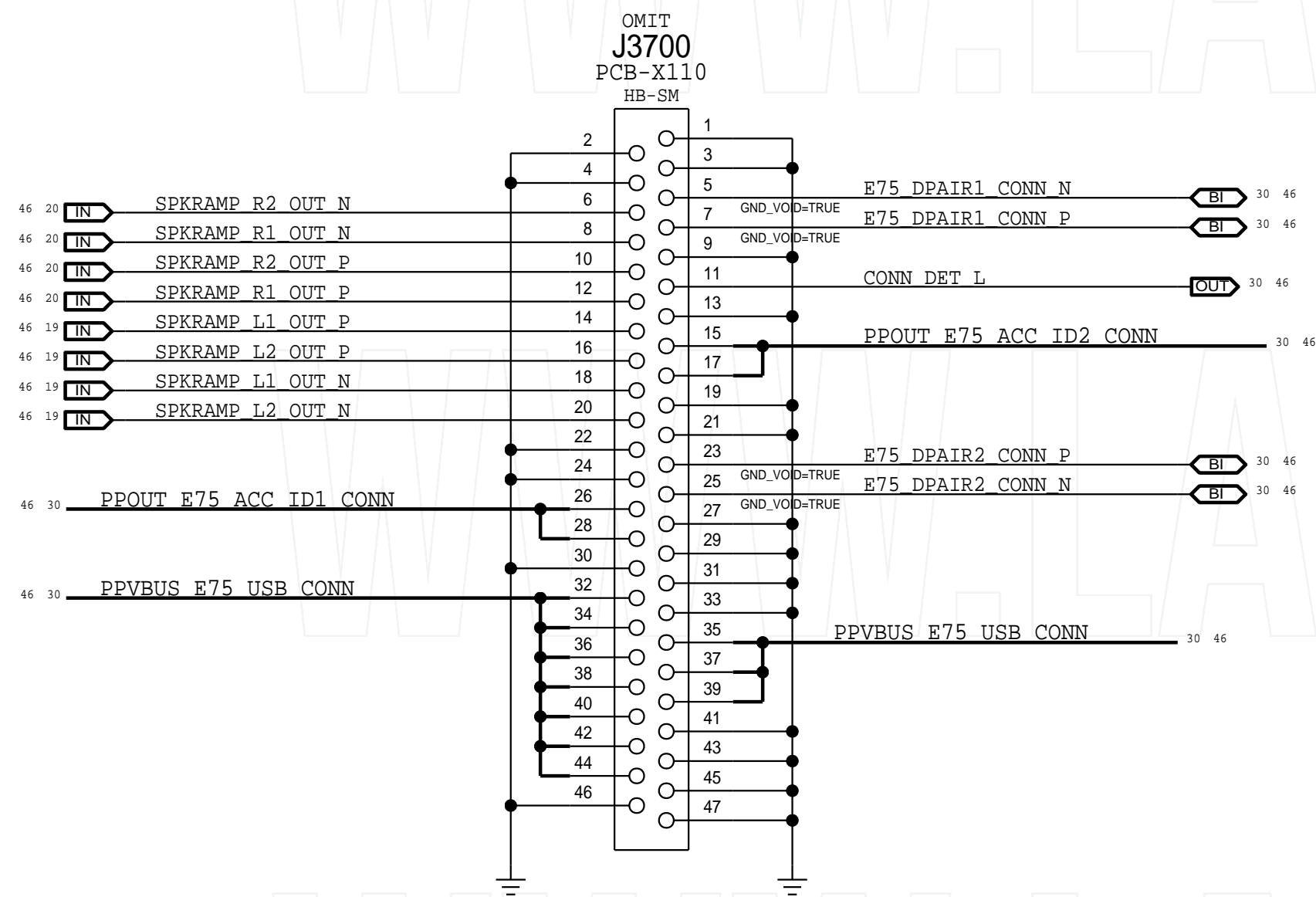
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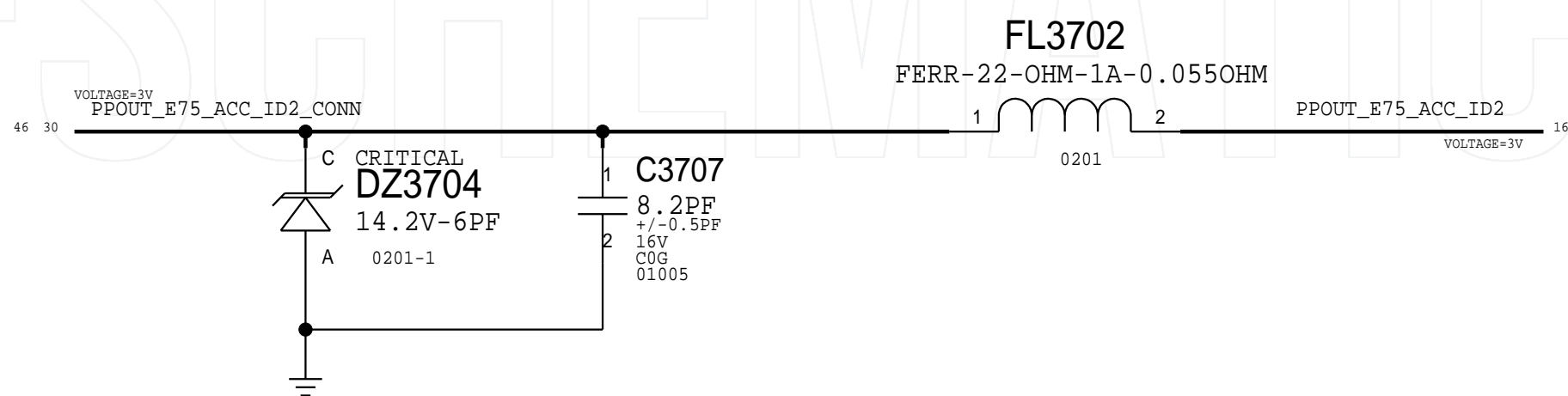
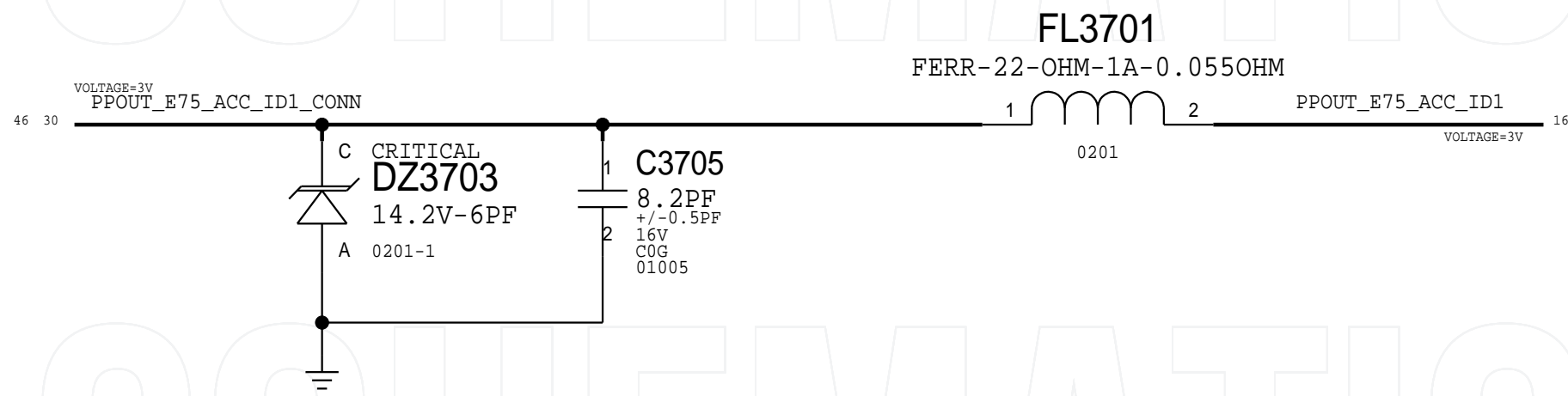
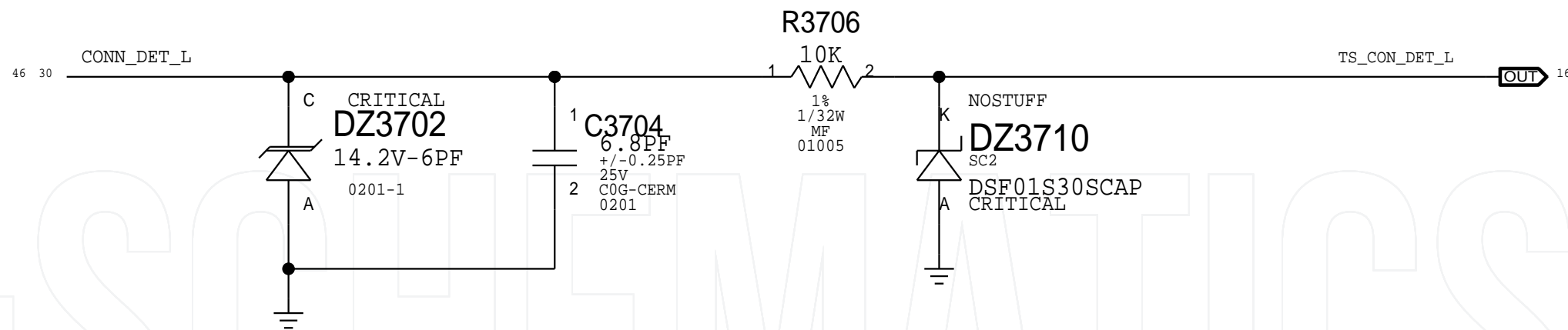
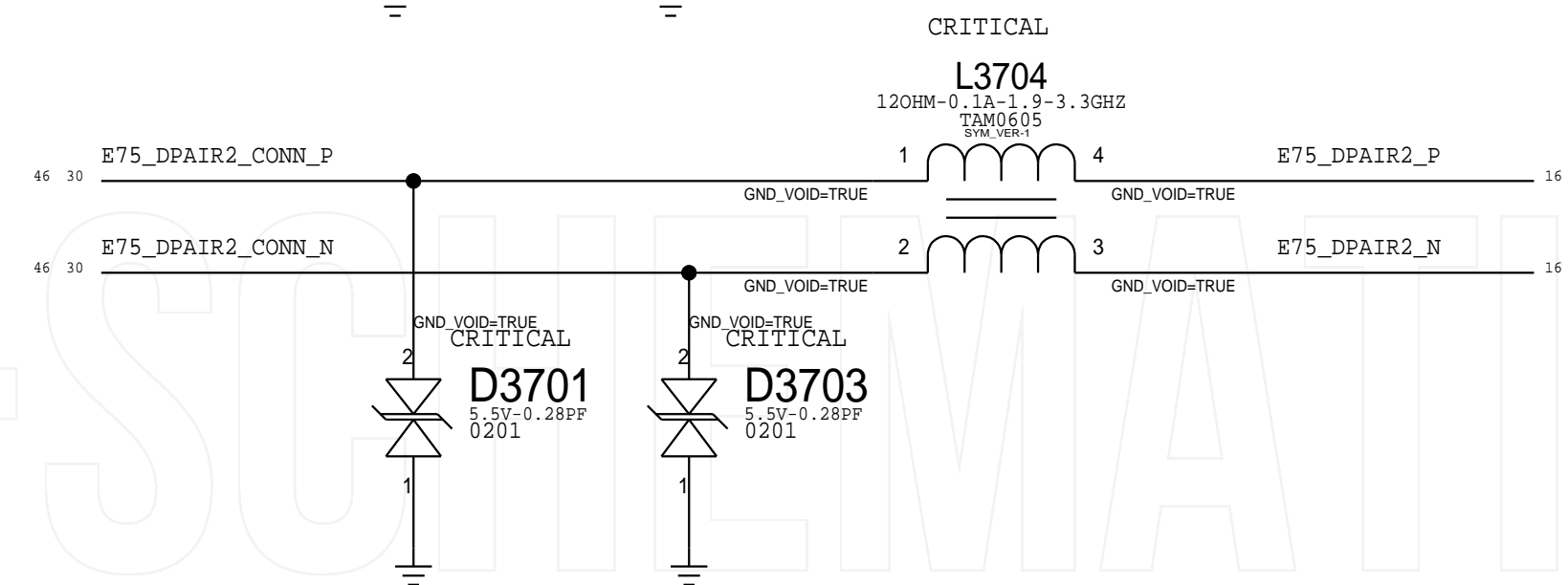
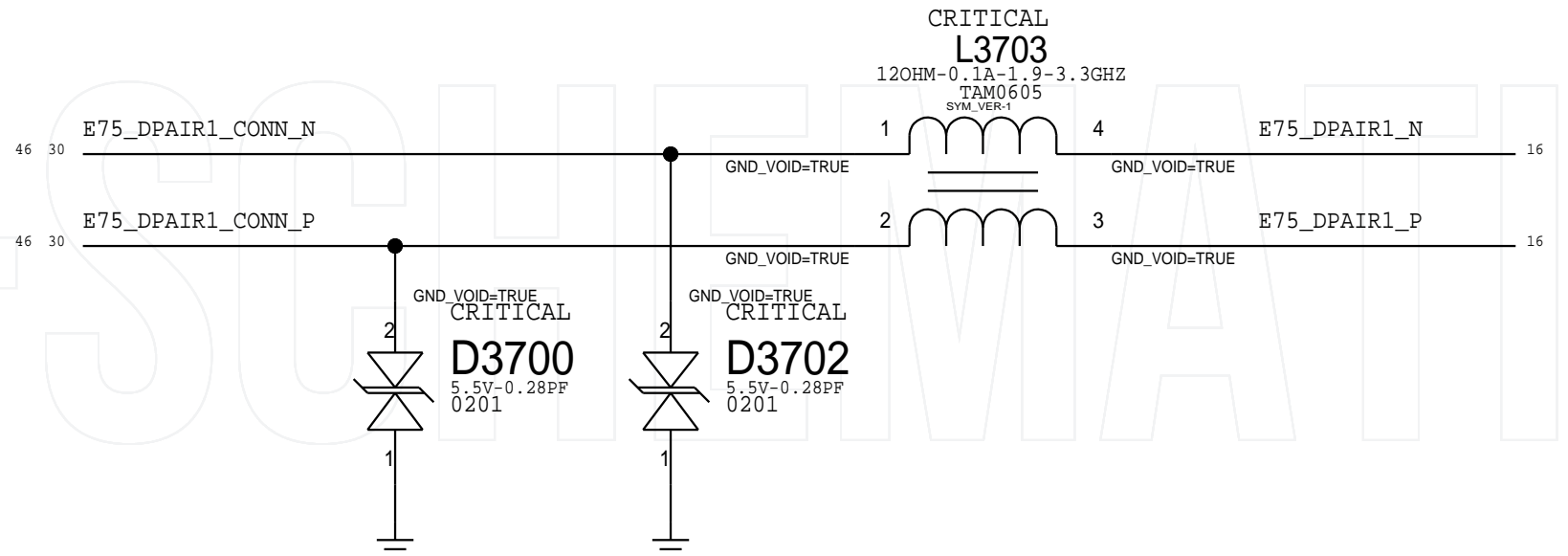
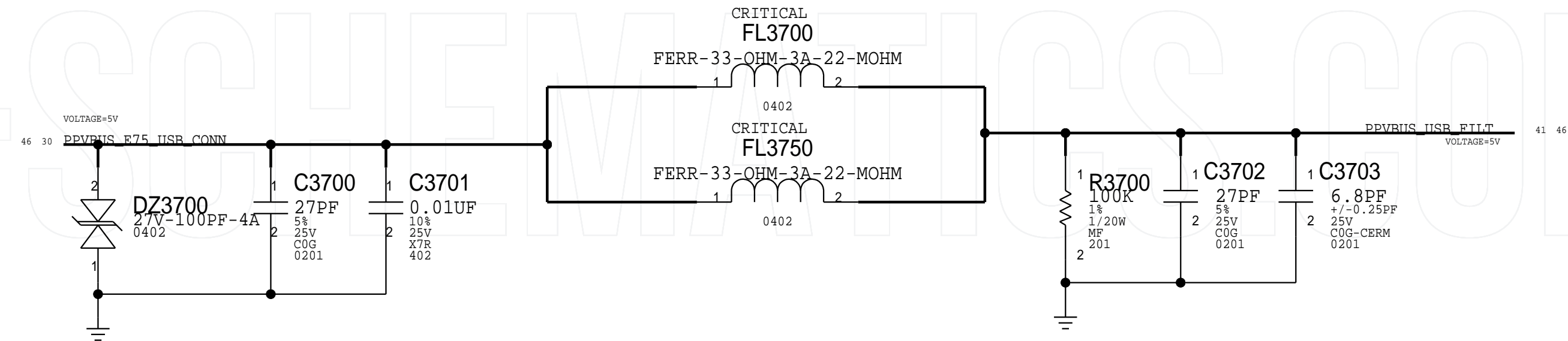
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IO FLEX HOTBAR PADS

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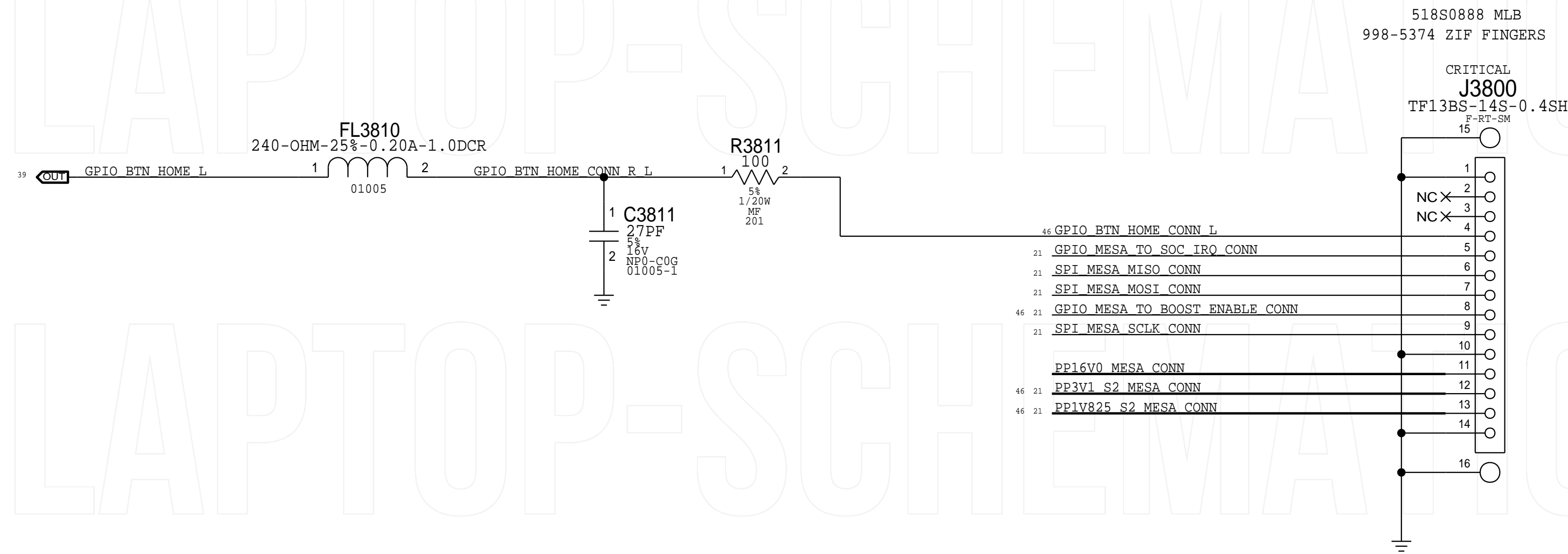


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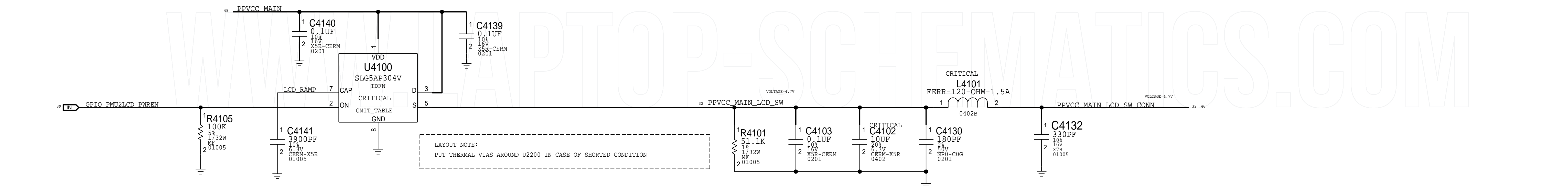
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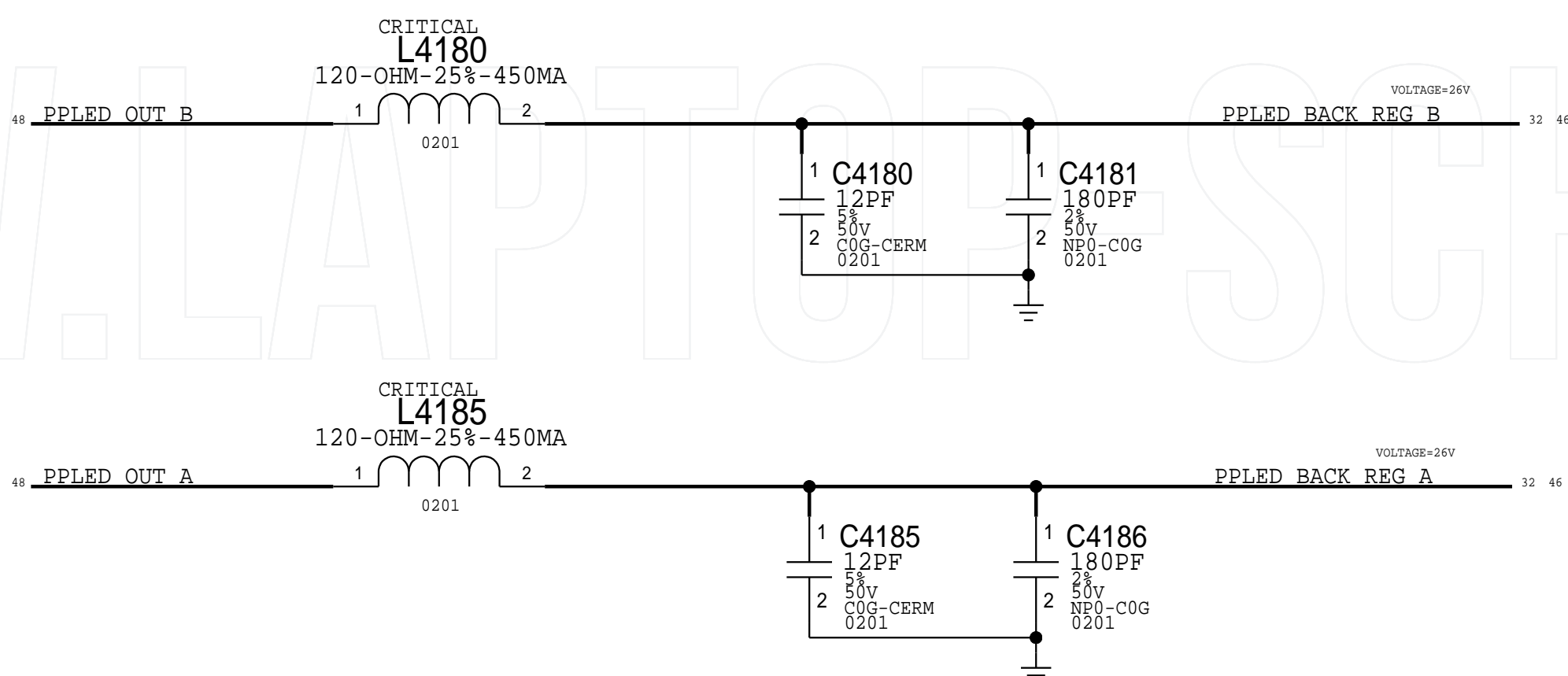
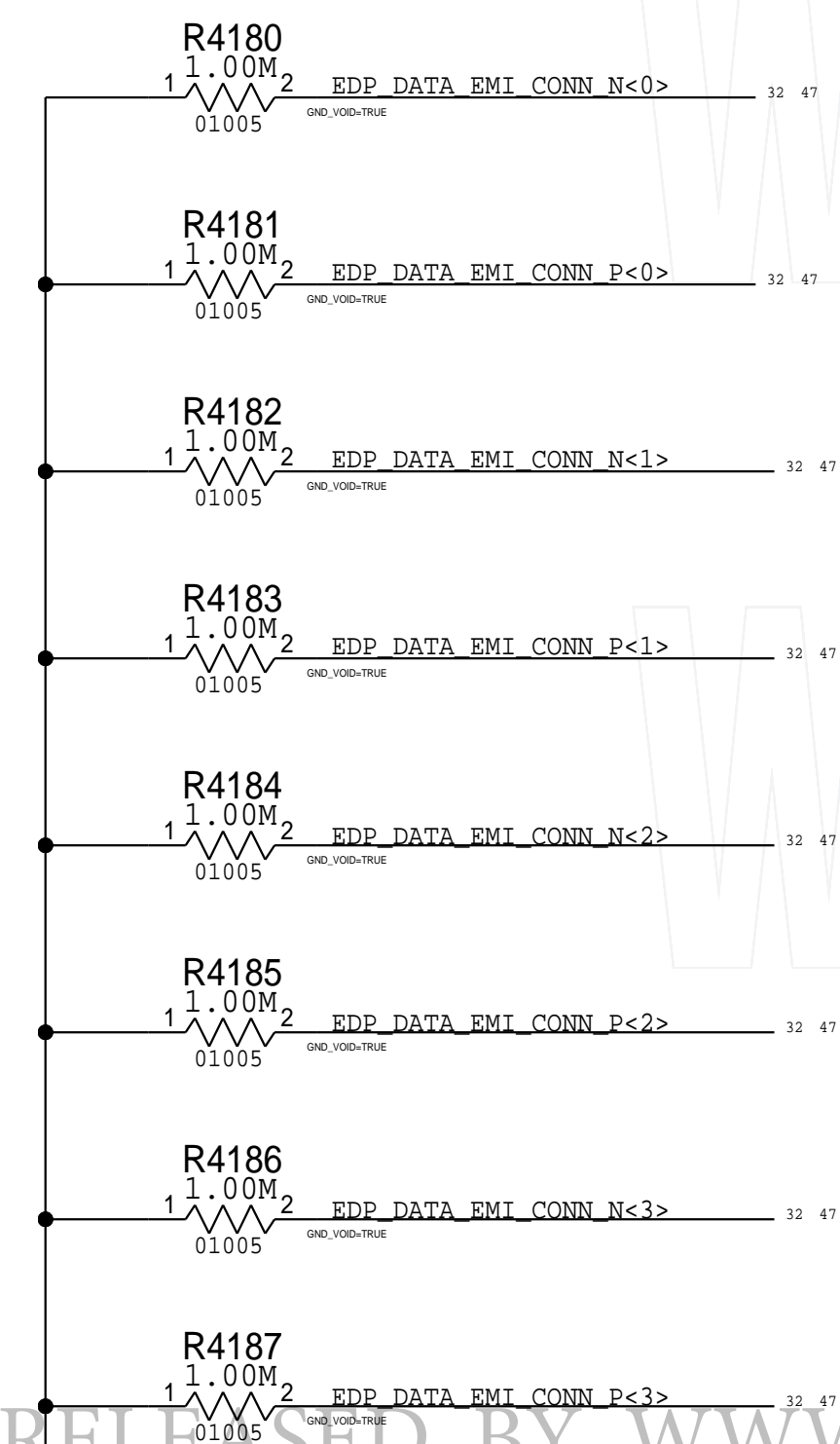
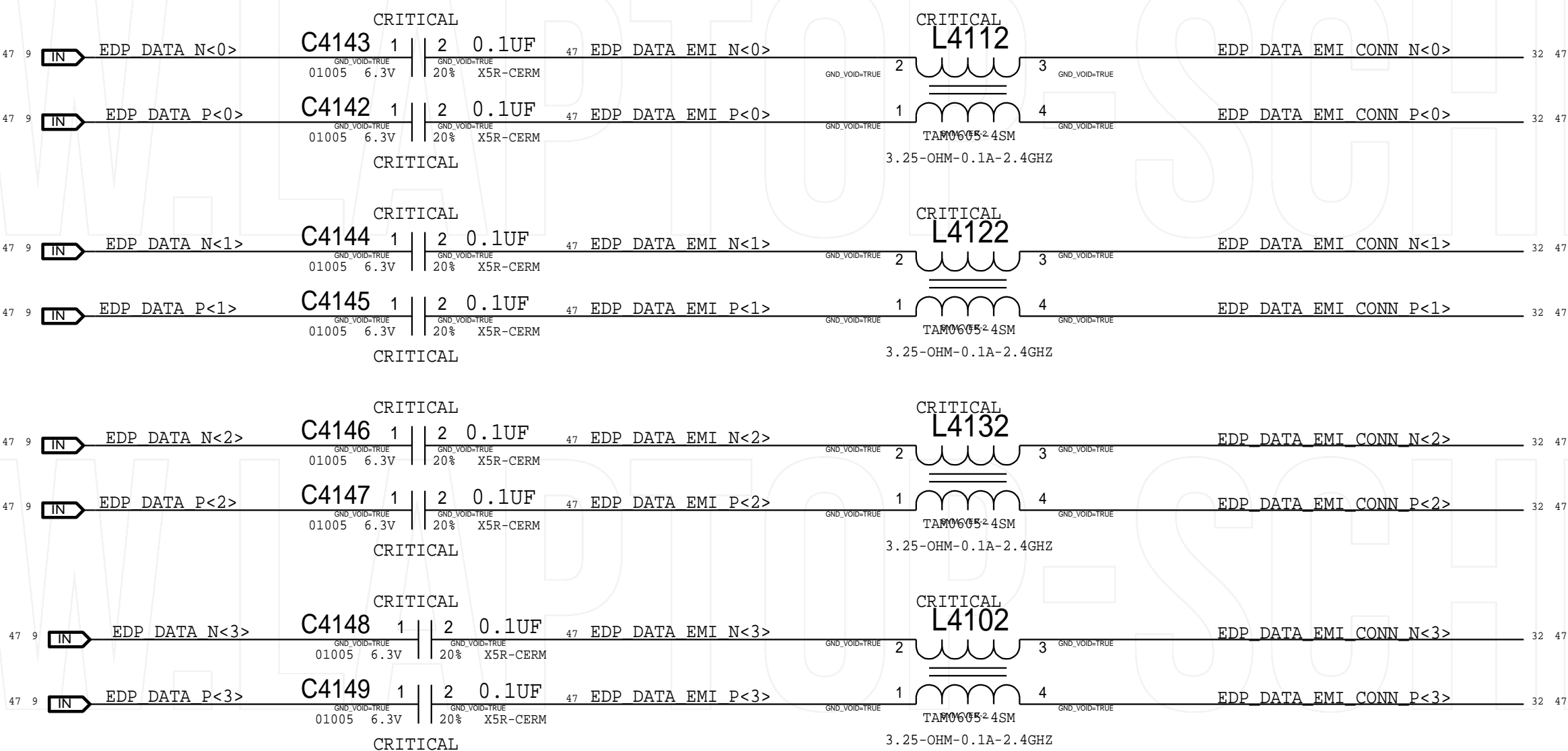
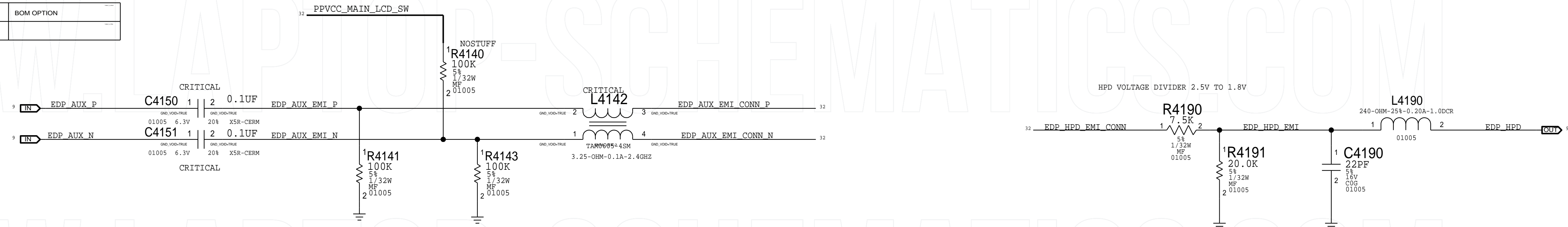
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EDP CONNECTOR SUPPORT

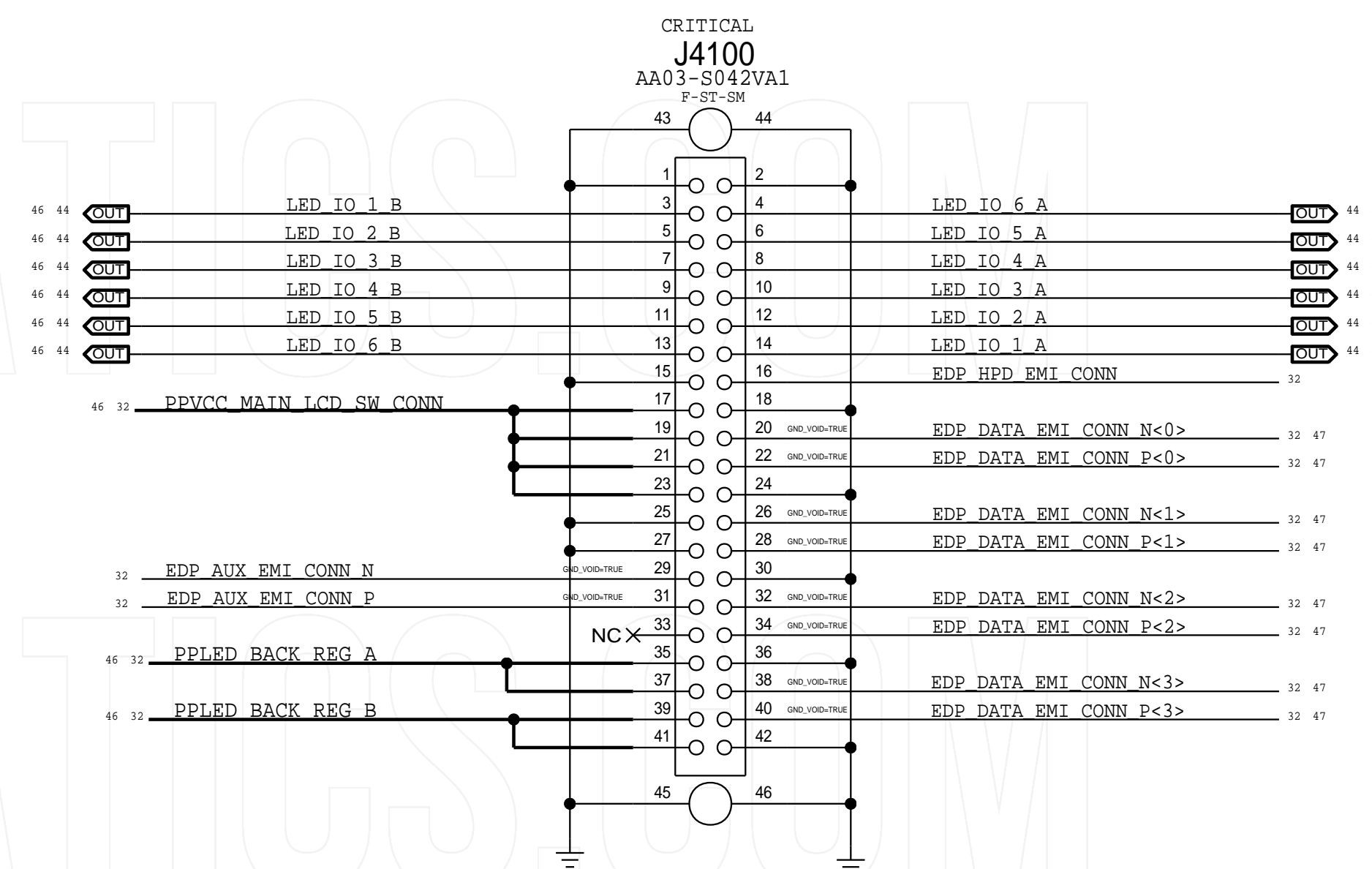



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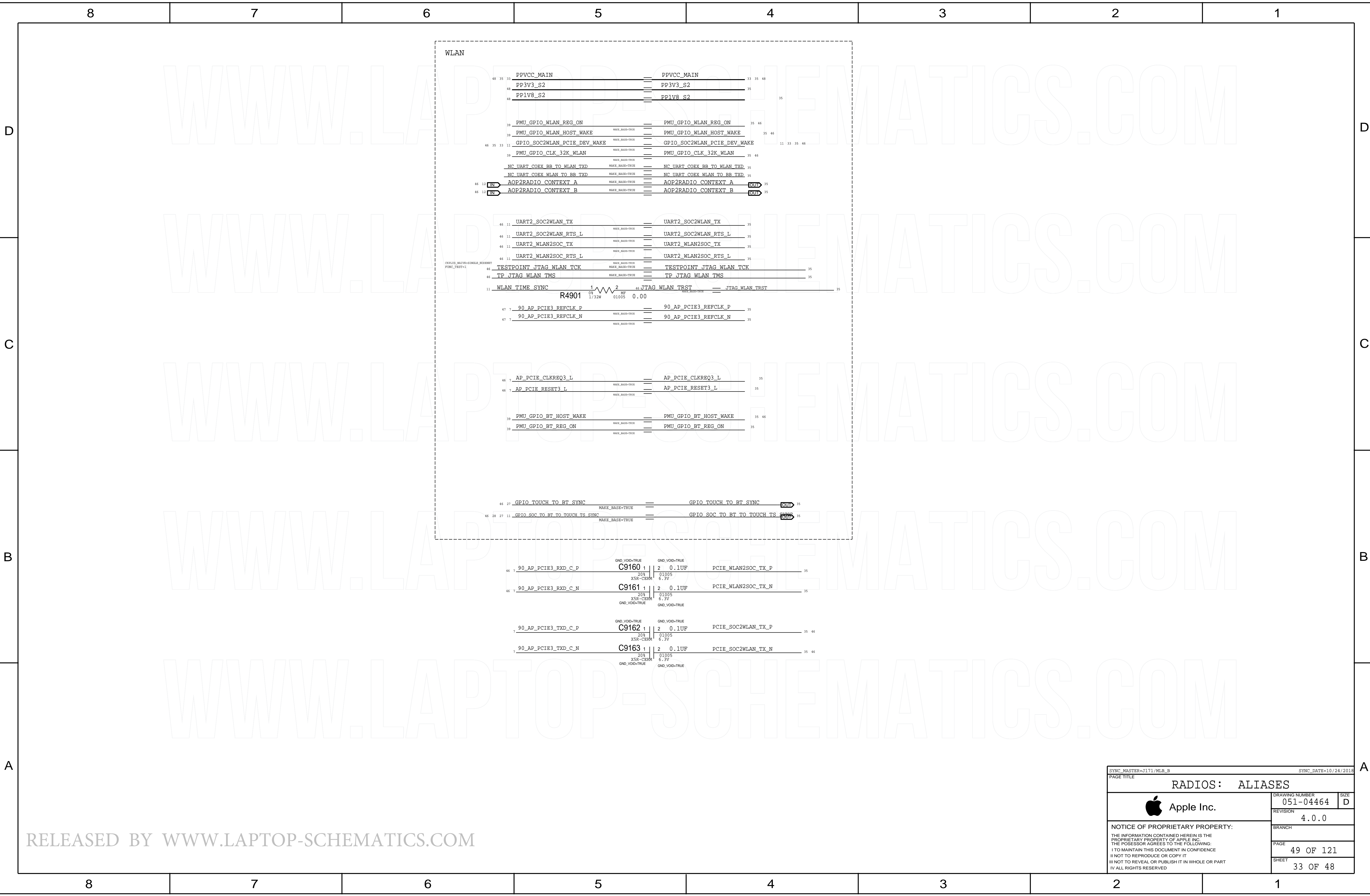


EDP CONNECTOR


PINOUT MATCHES DISPLAY_EDP_FLEX 1.0.0 1/7/13



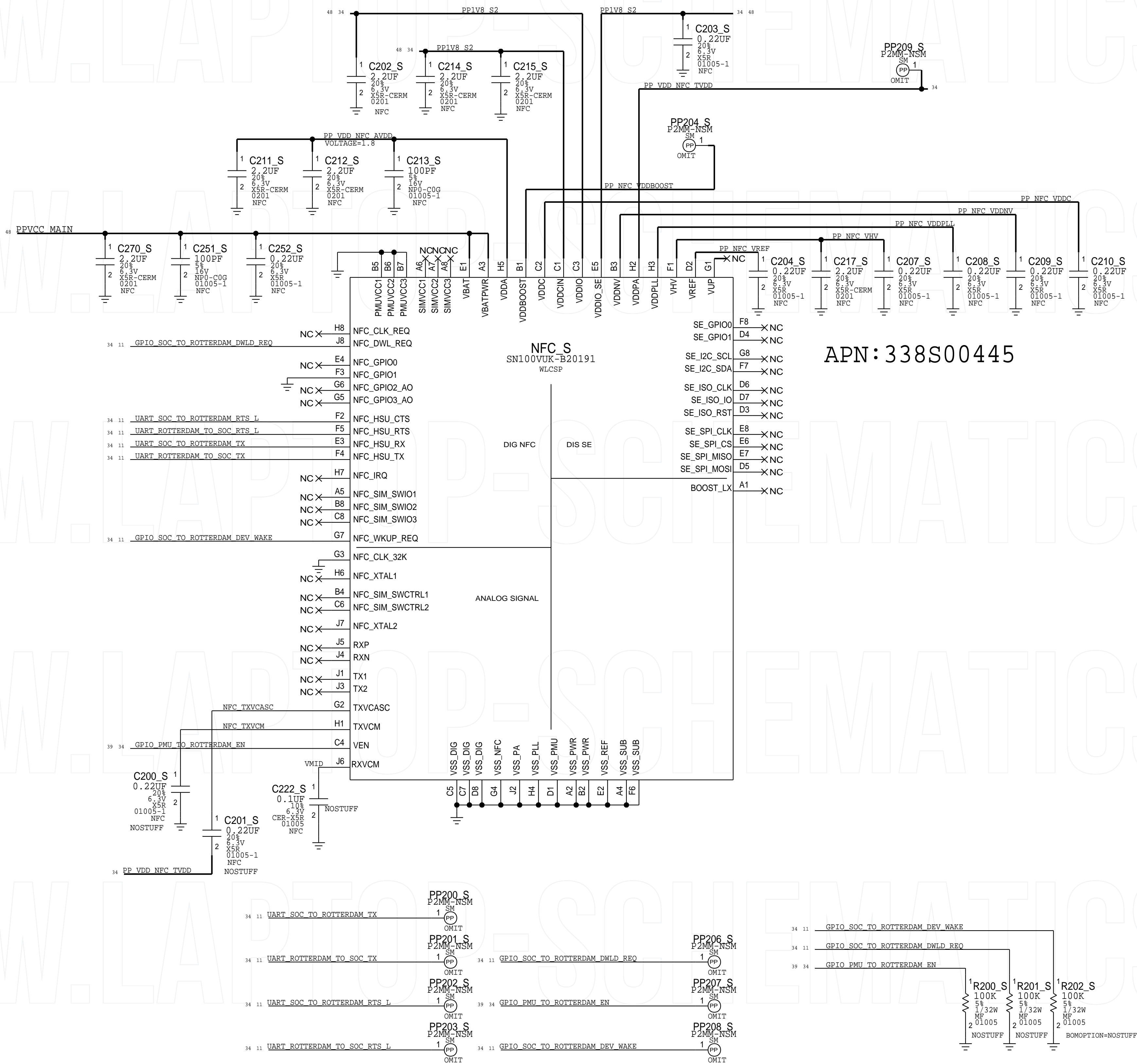
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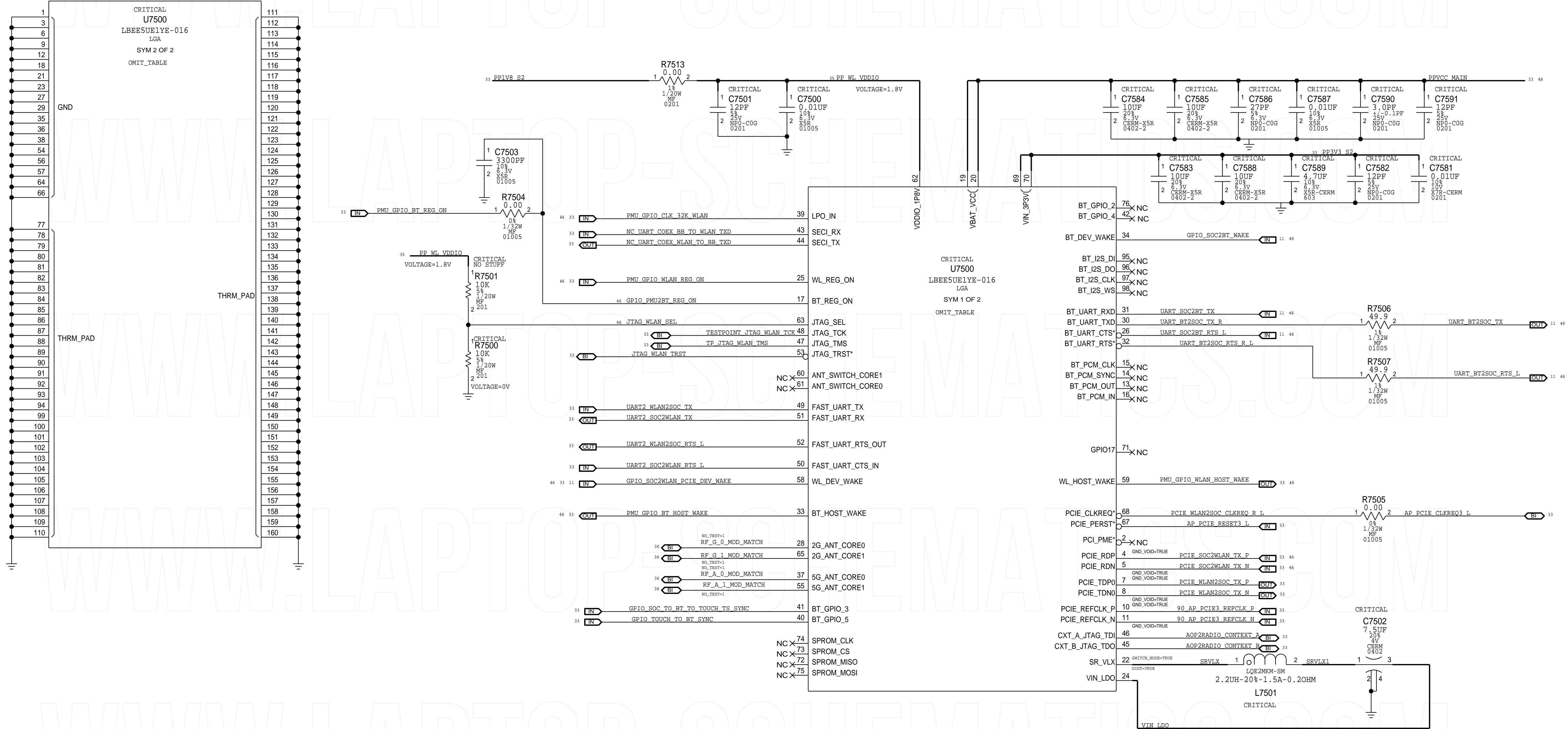
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WIFI/BT: J171: YEBISU MODULE, POWER, I/O



MODULE: USI ALTERNATES FOR MUR

| PART NUMBER | ALTERNATE FOR PART NUMBER | BOM OPTION | REF DES | COMMENTS: |
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| 339800448 | 339800446 | | U7500 | CIDRE USI ALT FOR MUR |

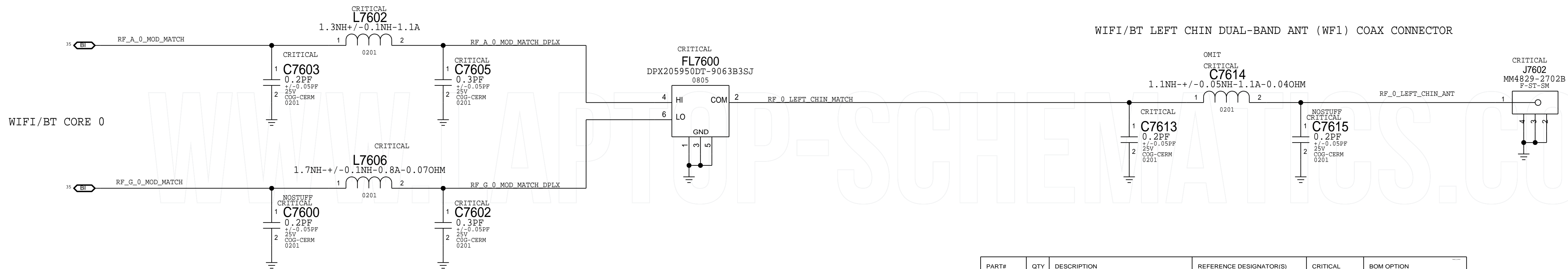
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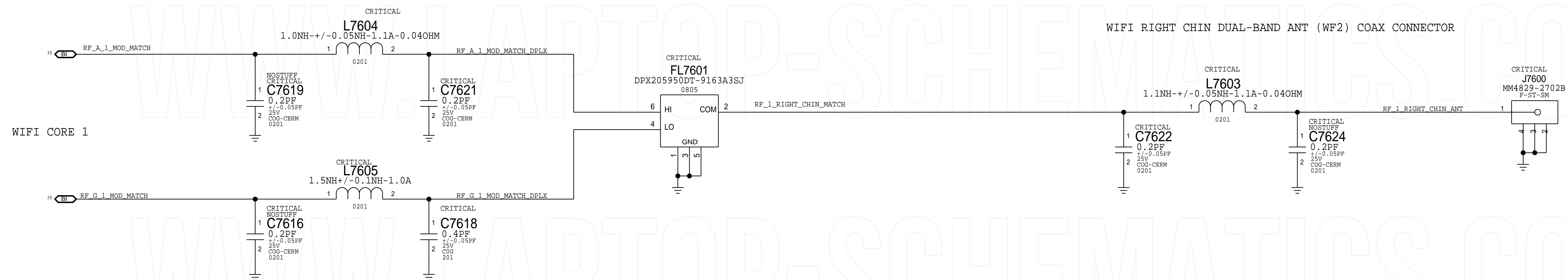
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WIFI/BT: J171 (WIFI/BT ONLY) RF FRONT END

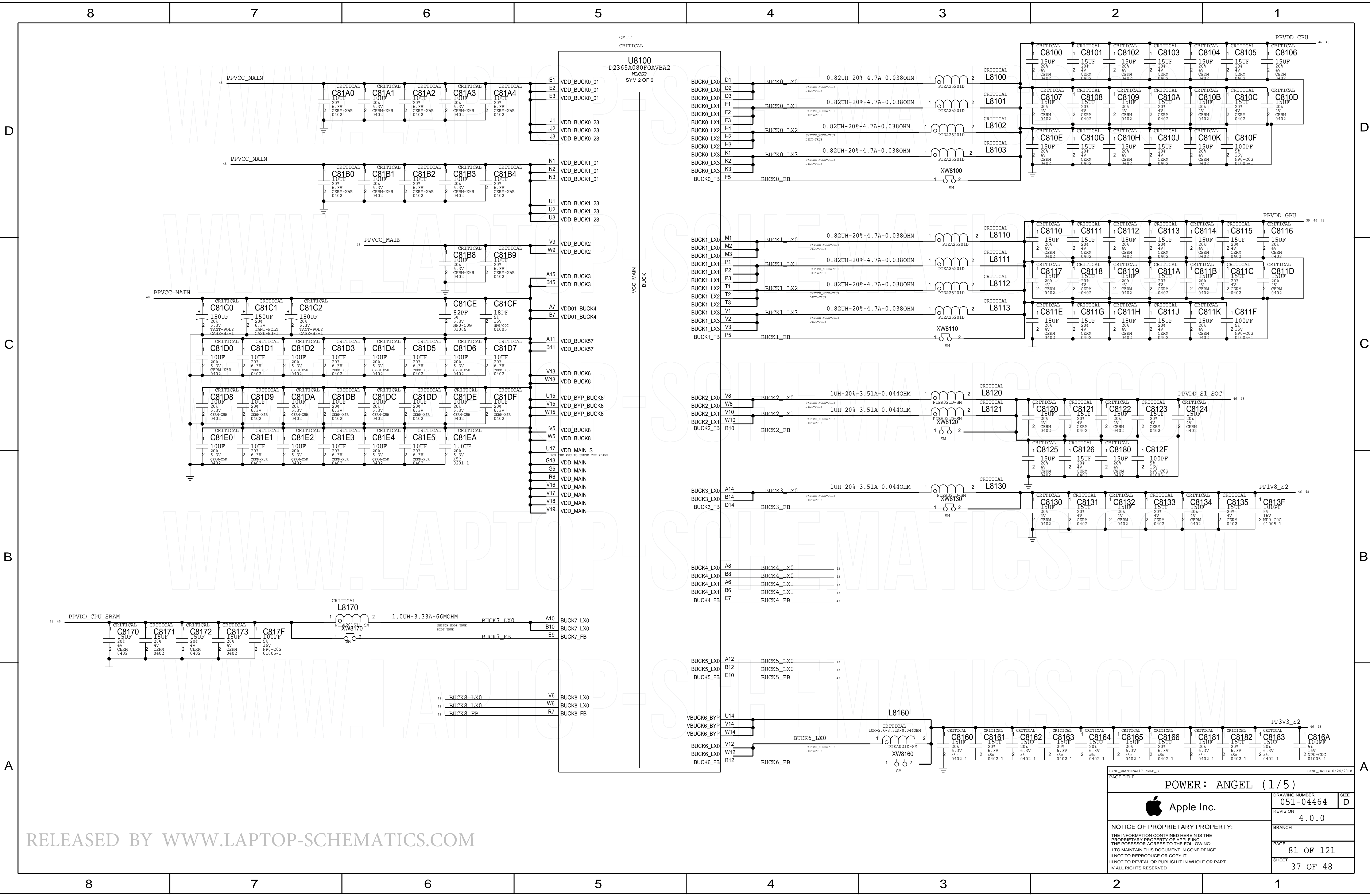


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| 152S00150 | 1 | 1NH, F212M, 0.78H, +/- 0.05NH, 1.1A, 0H-Q, 0201 | C7614 | CRITICAL | |



LAST UPDATED: 11/08/2018

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POWER: ANGEL (1/5)

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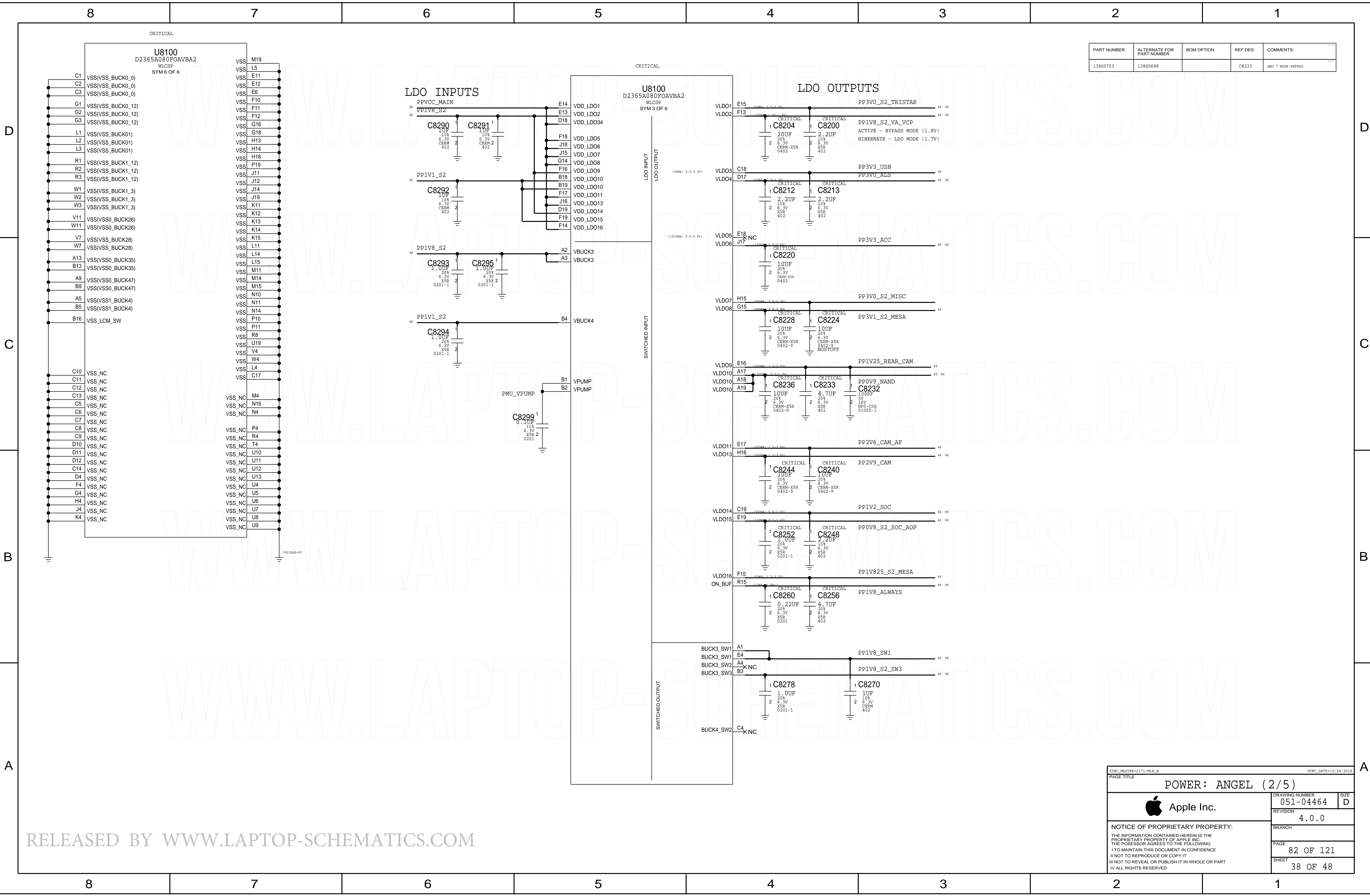
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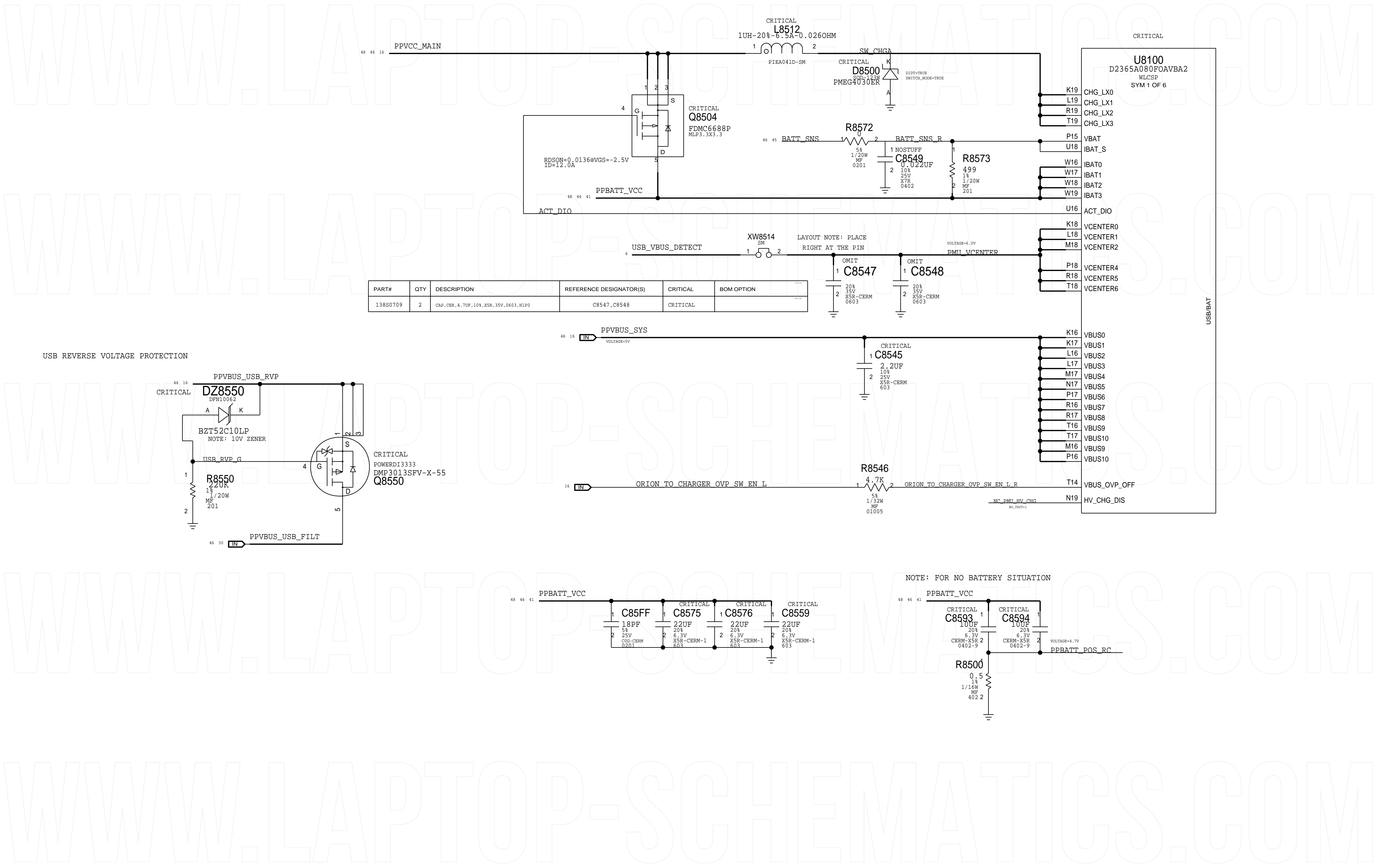
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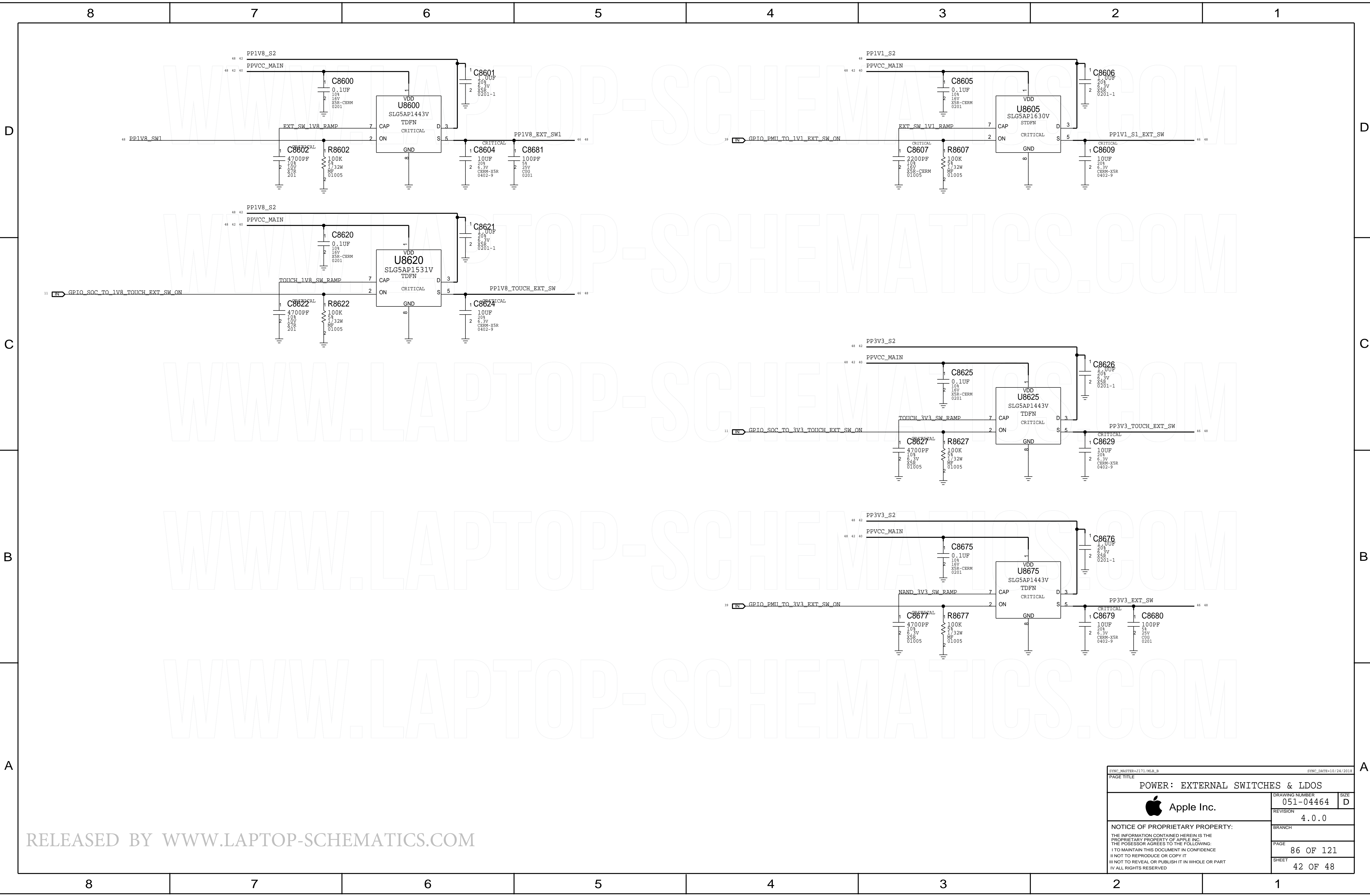
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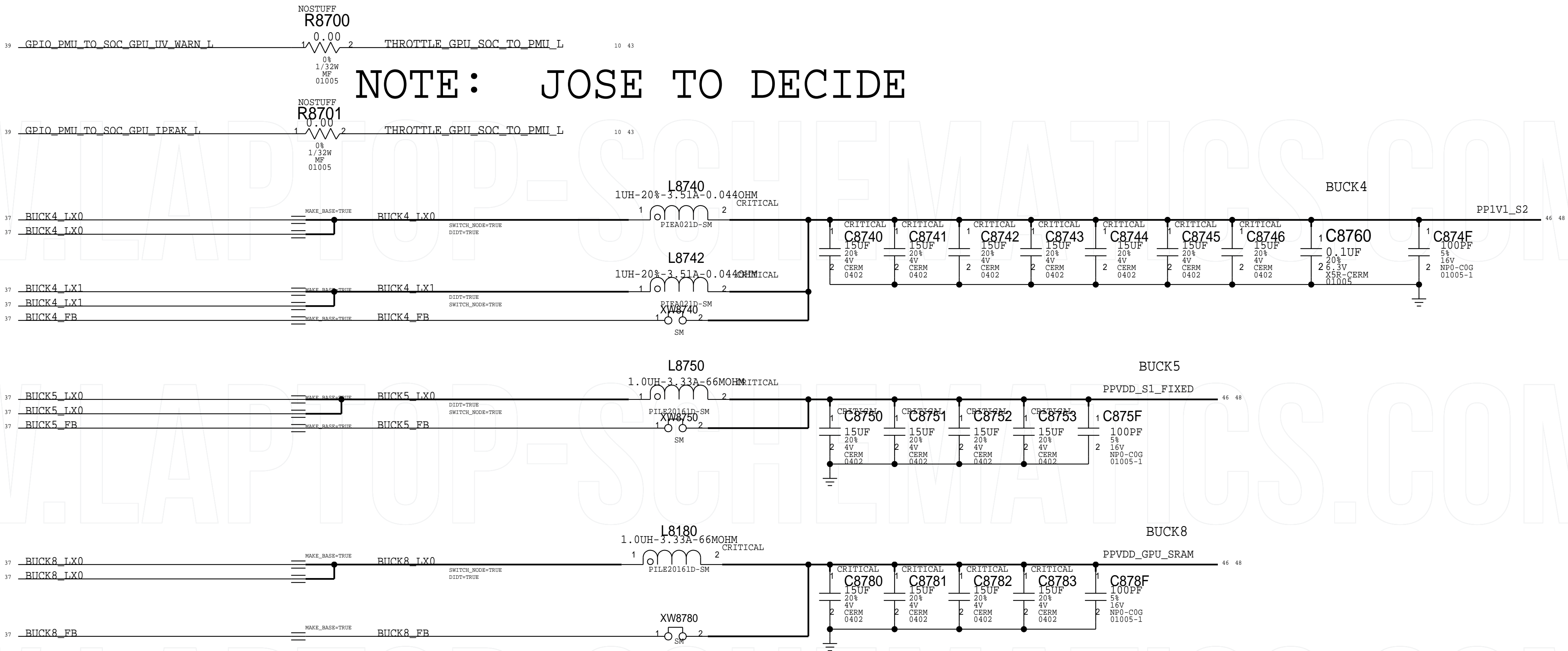
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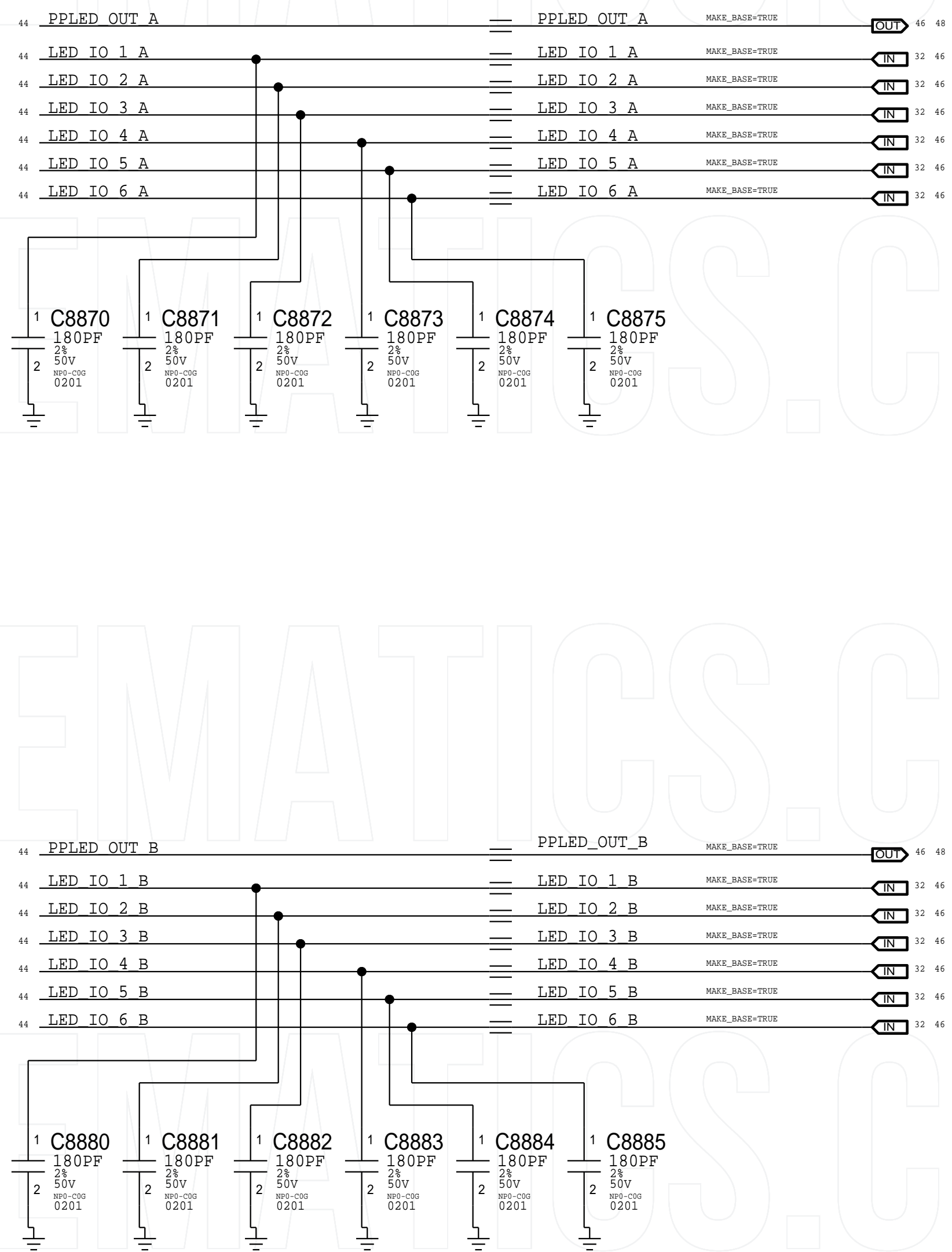
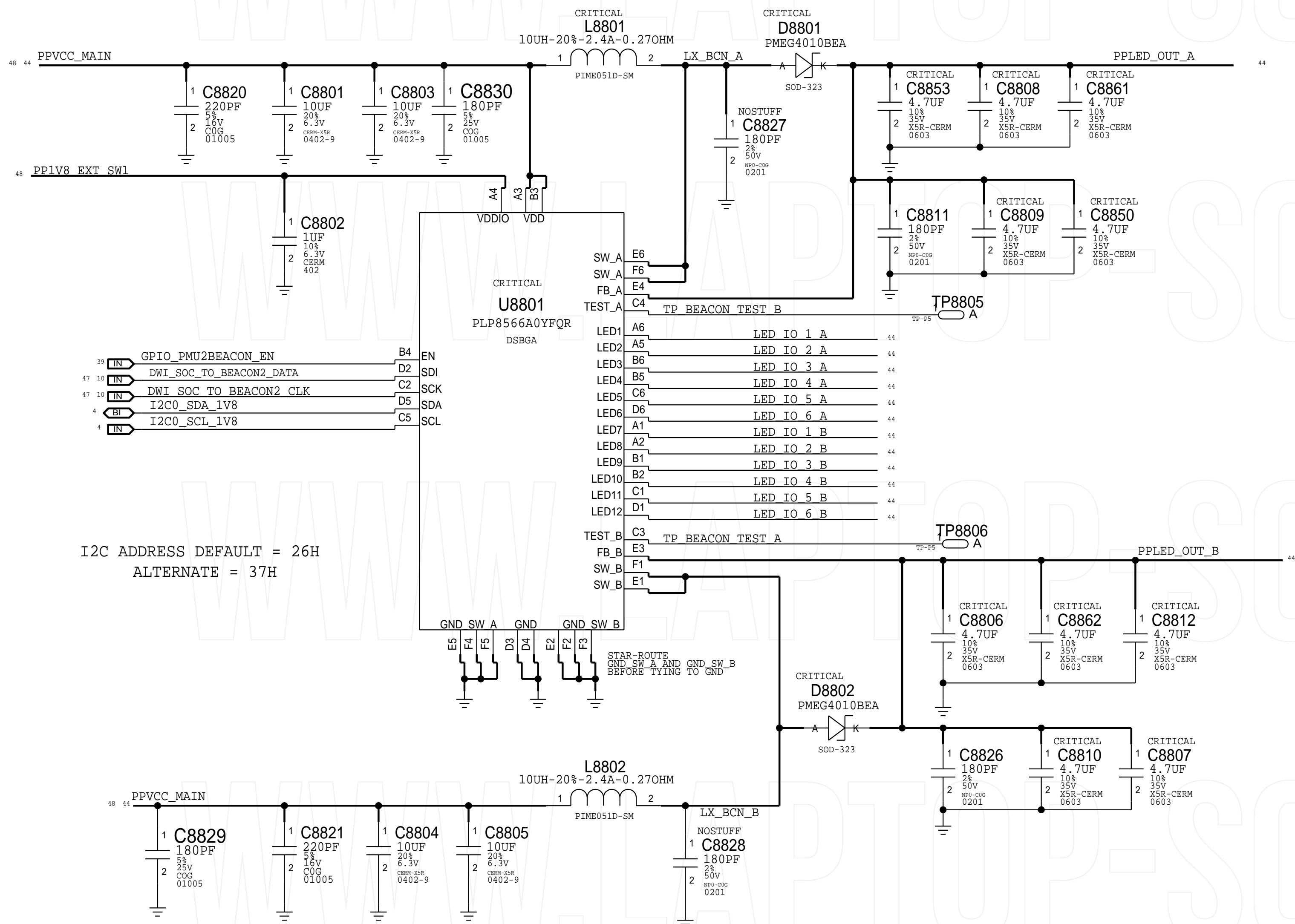
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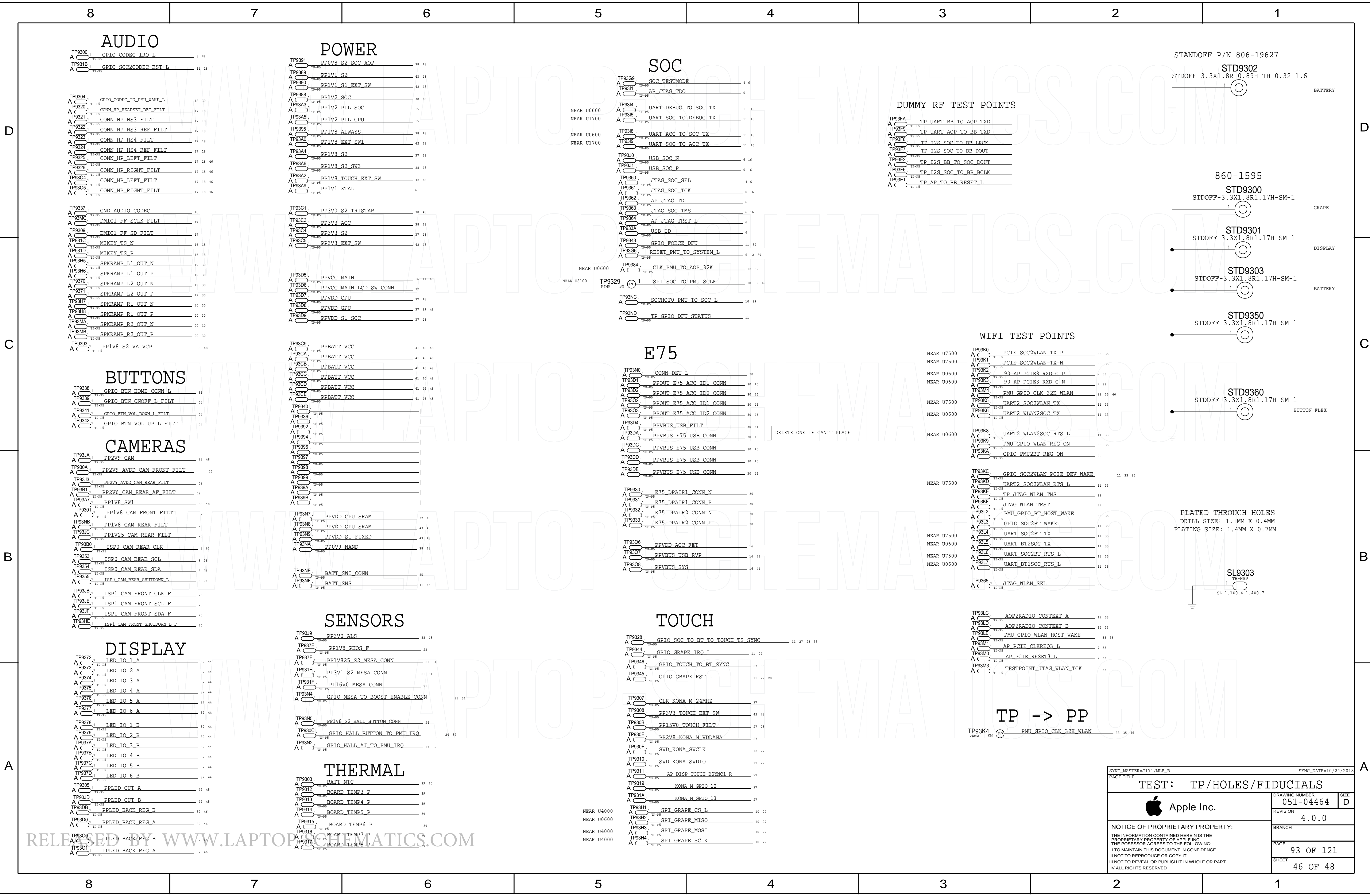


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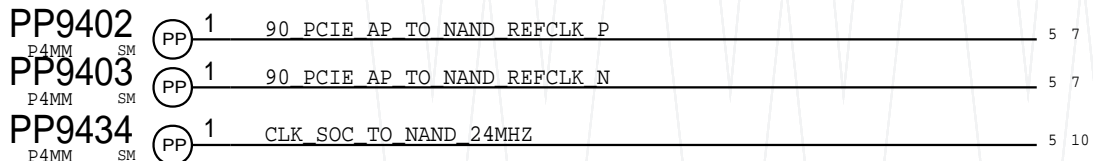
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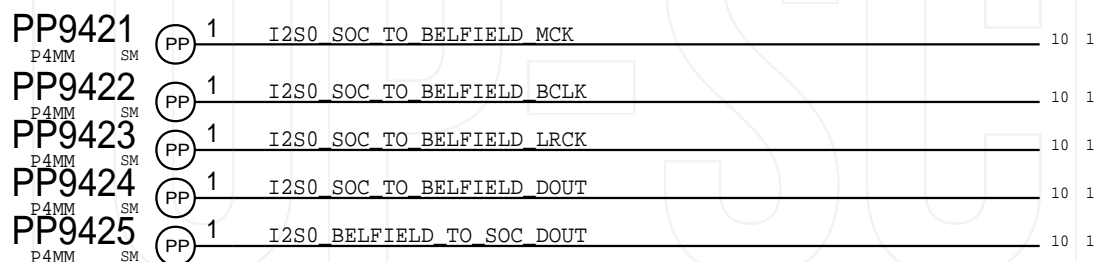
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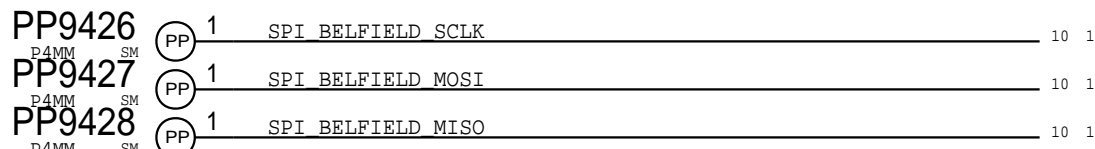
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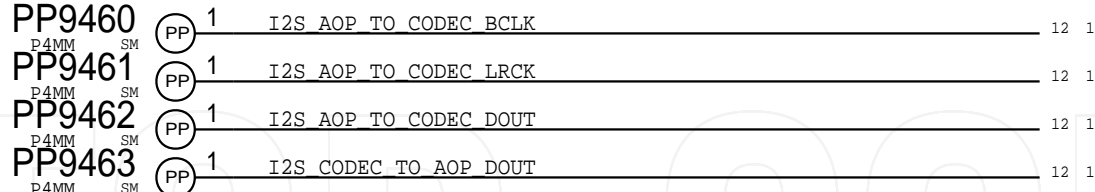
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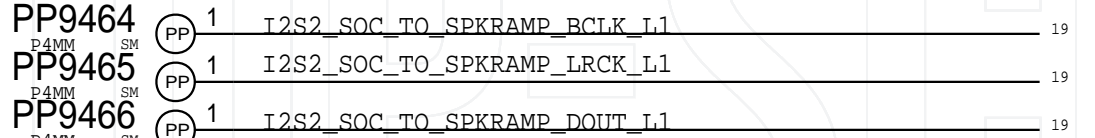
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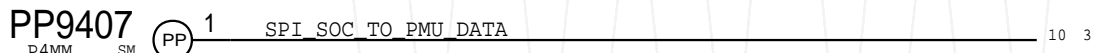


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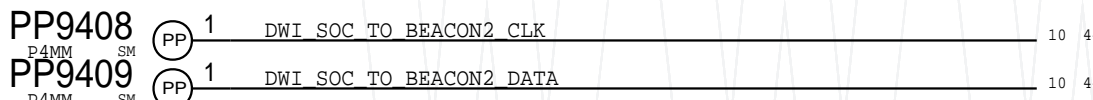


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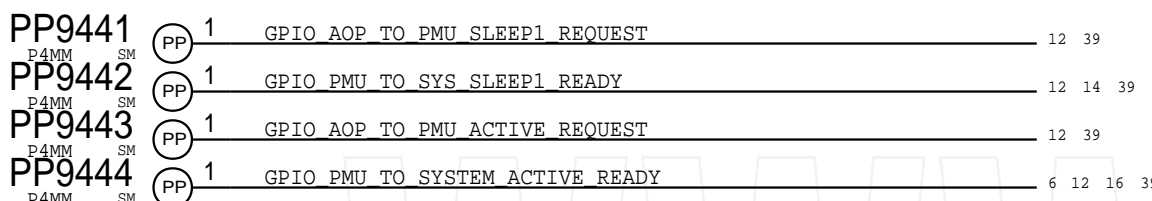
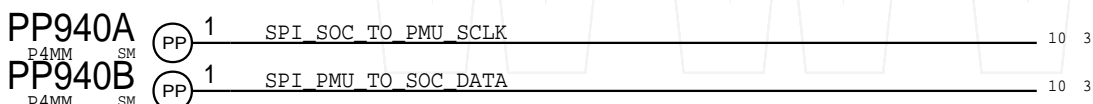
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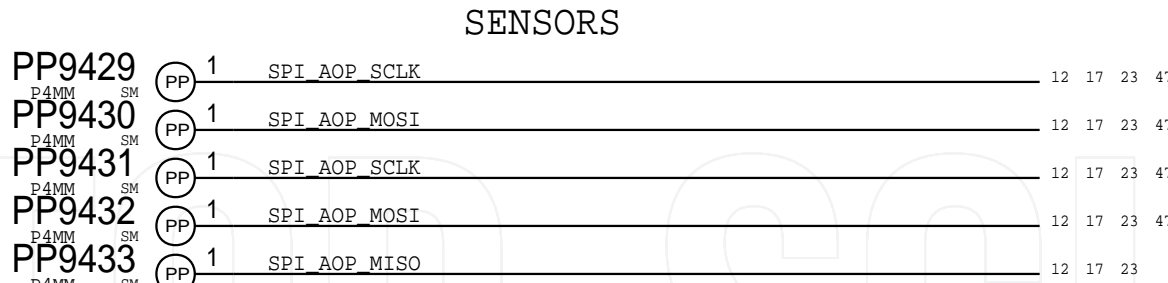
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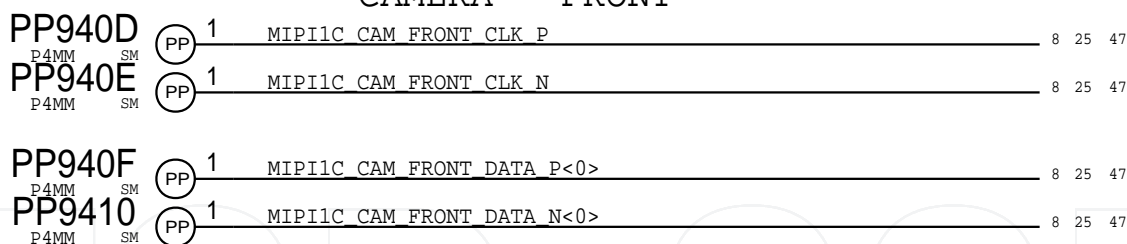
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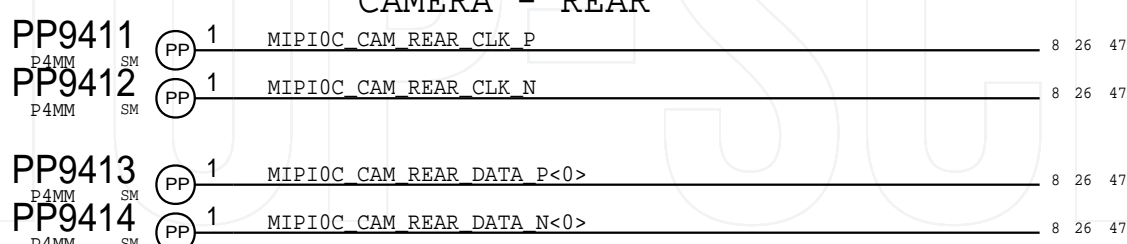
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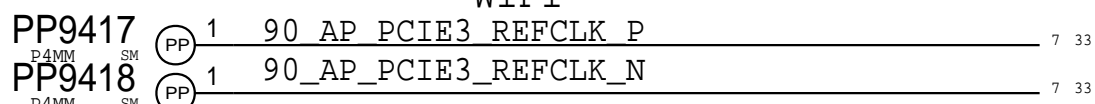
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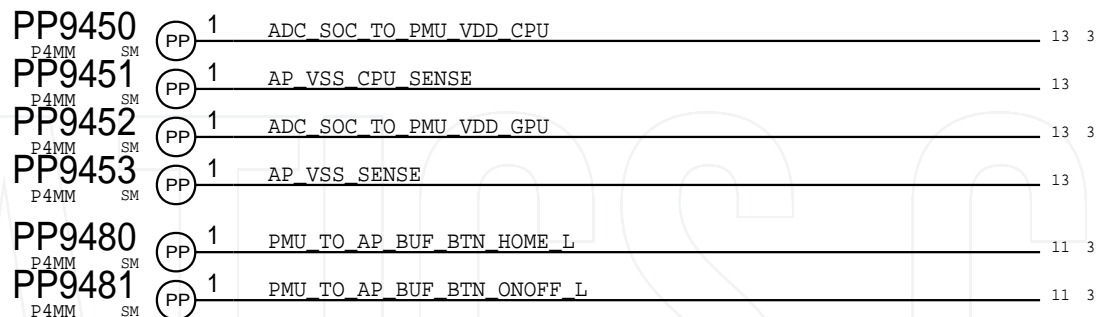


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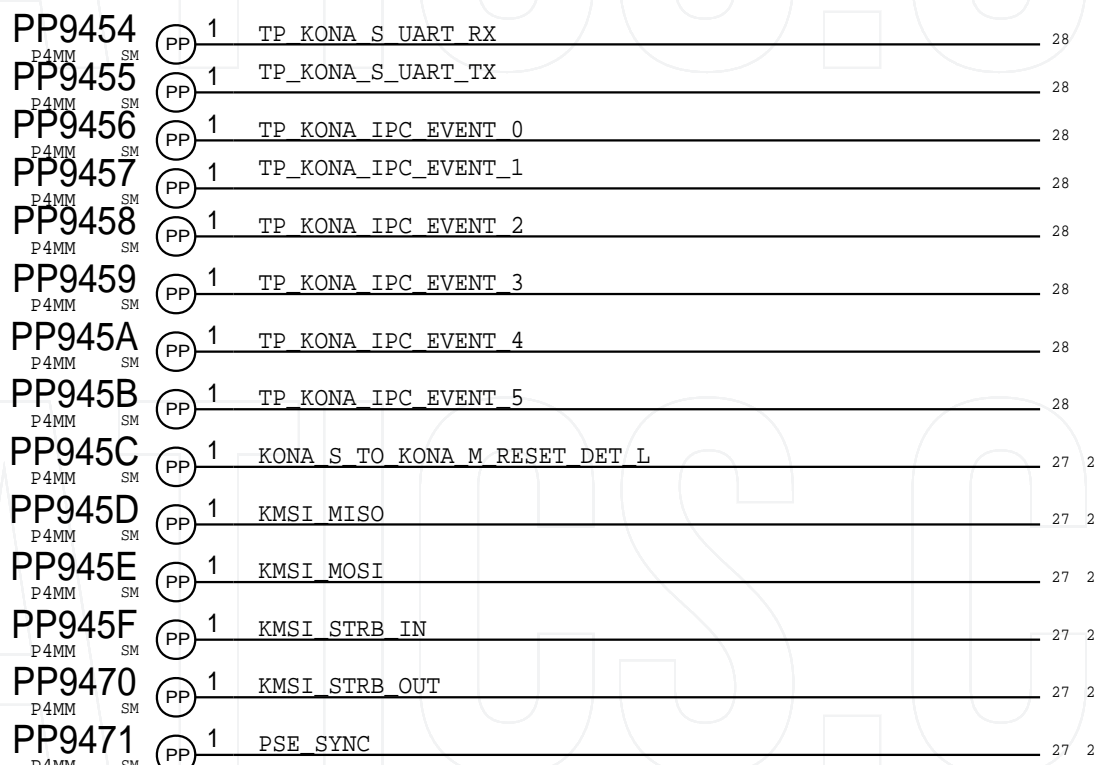
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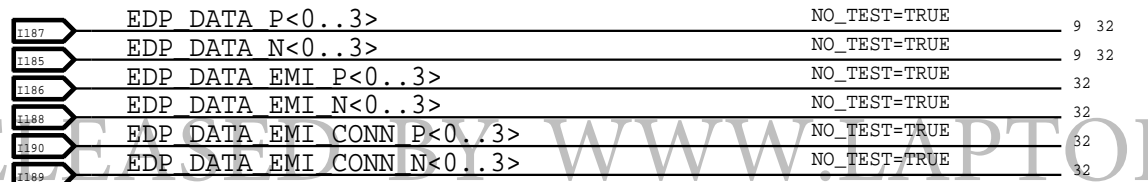
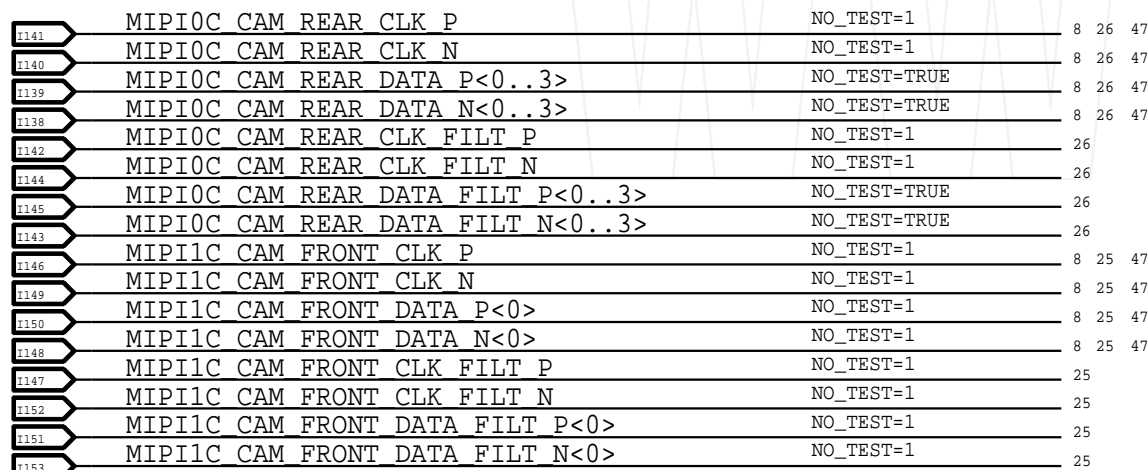
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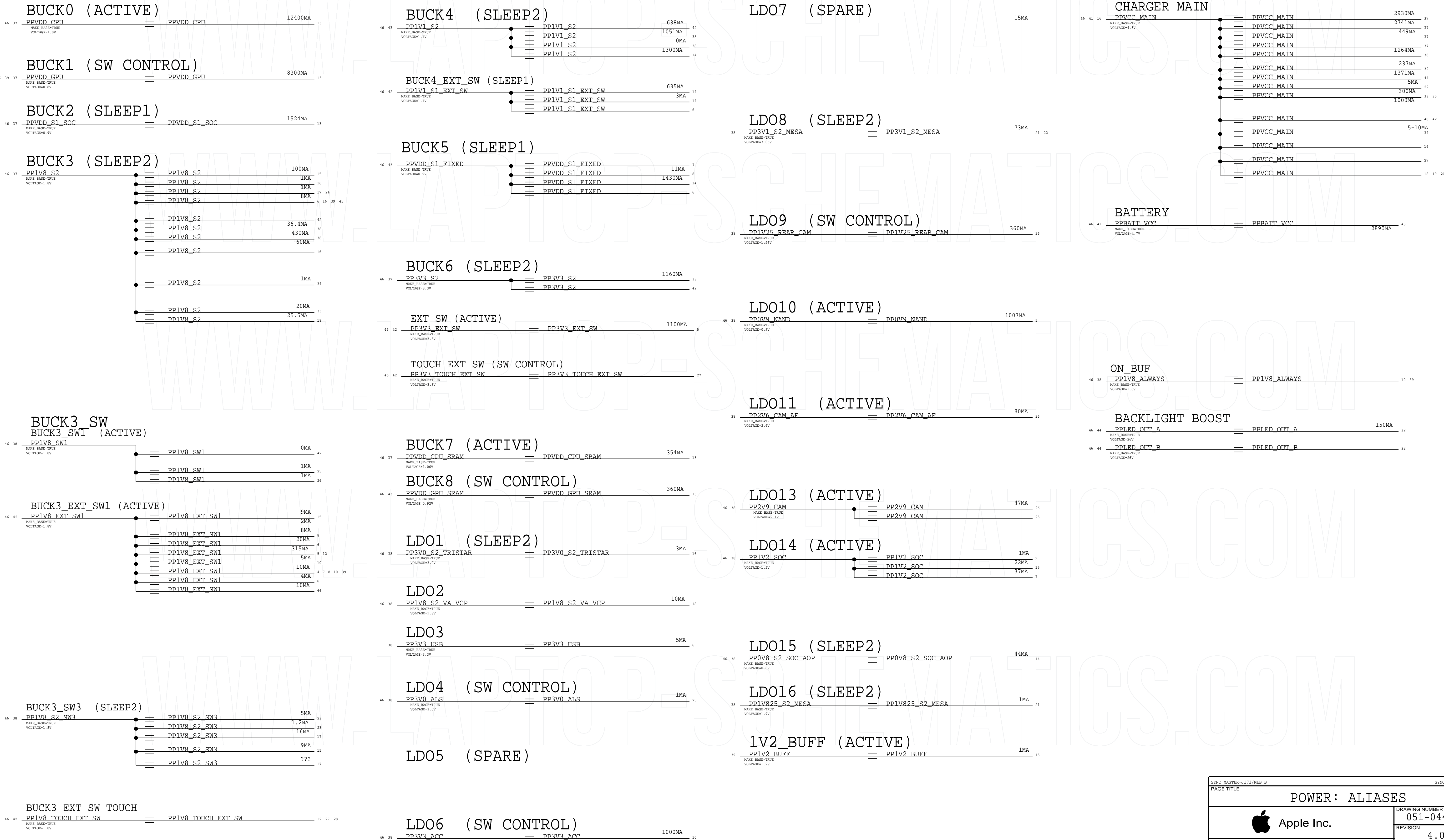
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POWER CONNECTIONS



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