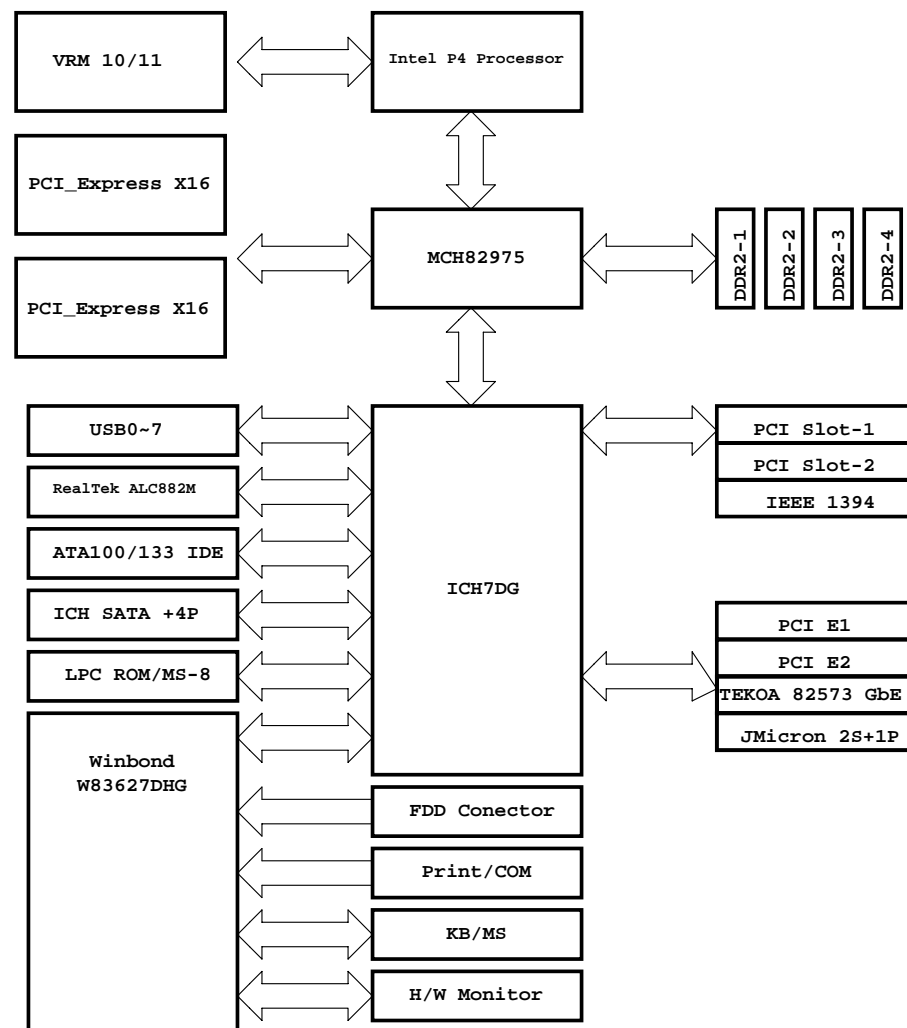


MS-7246 Version: 2B



001-System Block Diagram

002-Power Delivery

003-VRD11 RT8802A 4Phase

004-Clock Generator

005-Intel LGA775 - Signals

006-Intel LGA775 - Power

007-Intel LGA775 - GND

008-MCH82975 CPU & PCIE Signal

009-MCH82975 Memory Signal

010-MCH82975 Misc & Power Signal

011-DDR II DIMM 1 & 2

012-DDR II DIMM 3 & 4

013-DDR II Termination & POWER

014-PEG Switch

015-PEGX16-1

016-PEGX16-2

017-ICH7 - PCI, DMI, CPU, IRQ

018- ICH7 - LPC, ATA, USB, GPIO

019-ICH7 - POWER & GND

020-RealTek ALC882M Audio

021-PCI Slot 1 & 2

022-1394 VIA VT-6307/6308P

023-Intel TEKOA Lan

024-JMicron 361/363

025- FWH SIO W83627EHG

026-MS-7 ACPI Controller

027-MS-8 & FirmwareHub

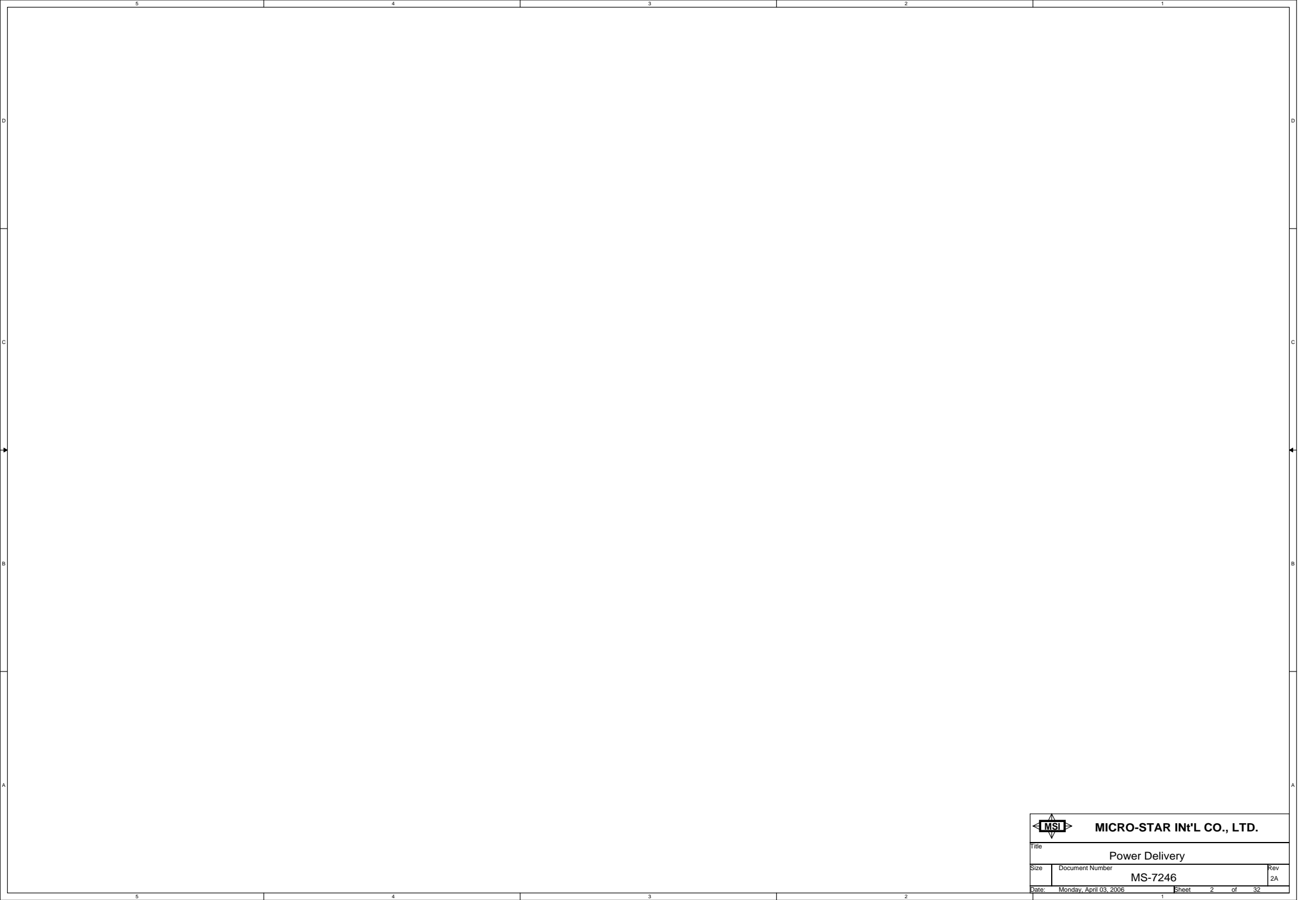
028-ATXPOWER & USB

029-Fintek F75334D

030-Fan Control

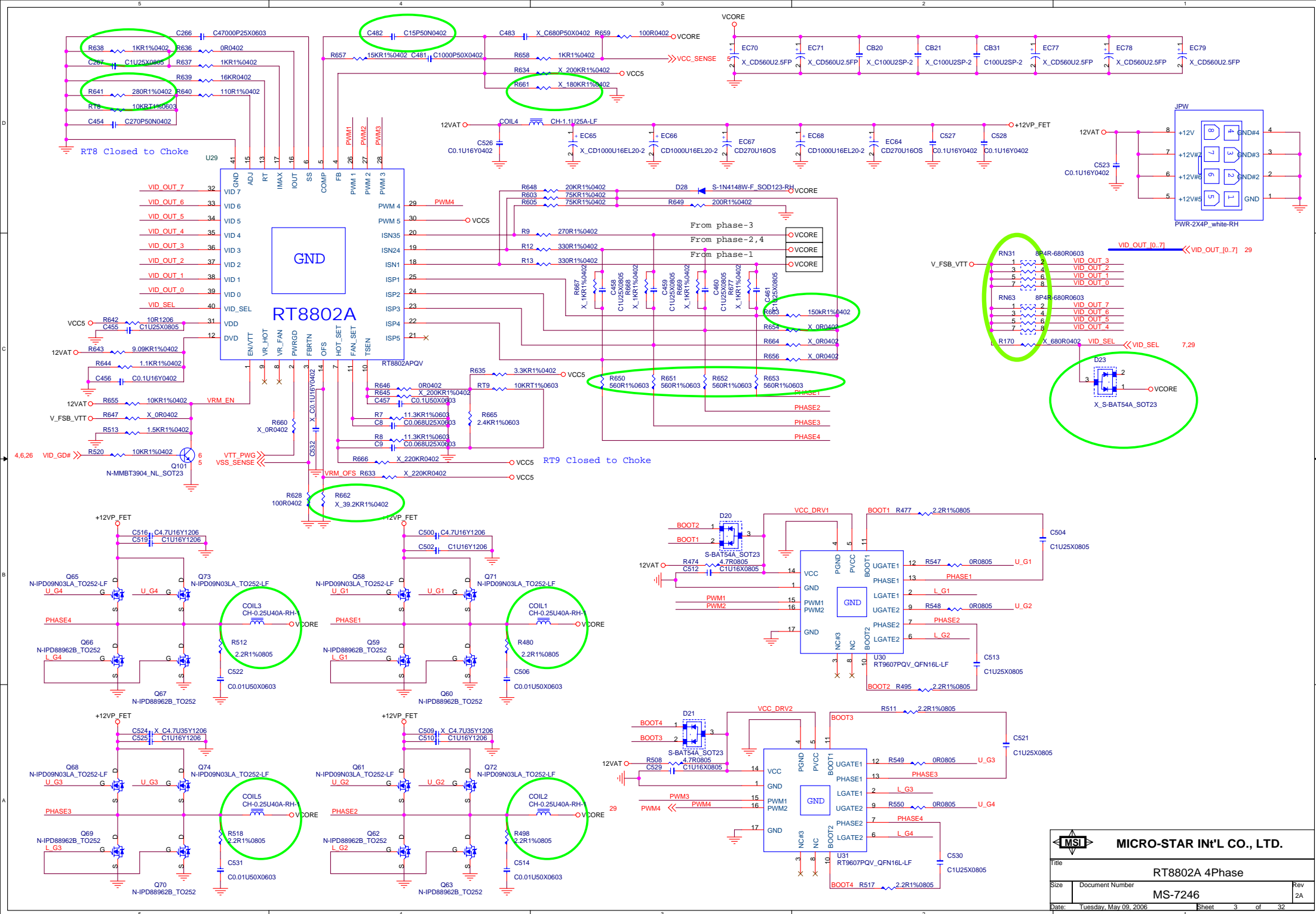
031-Auto BOM manual

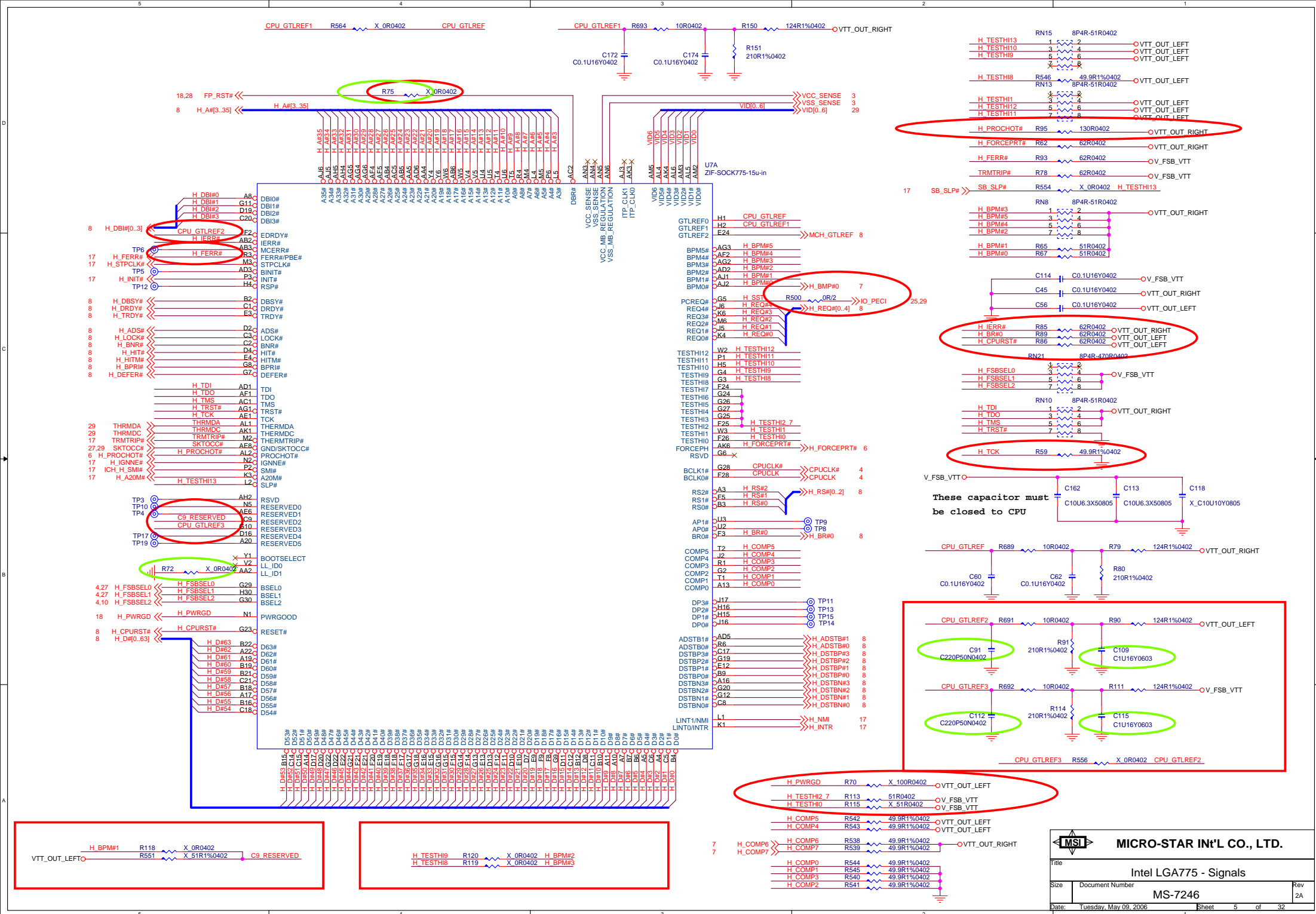
032-History

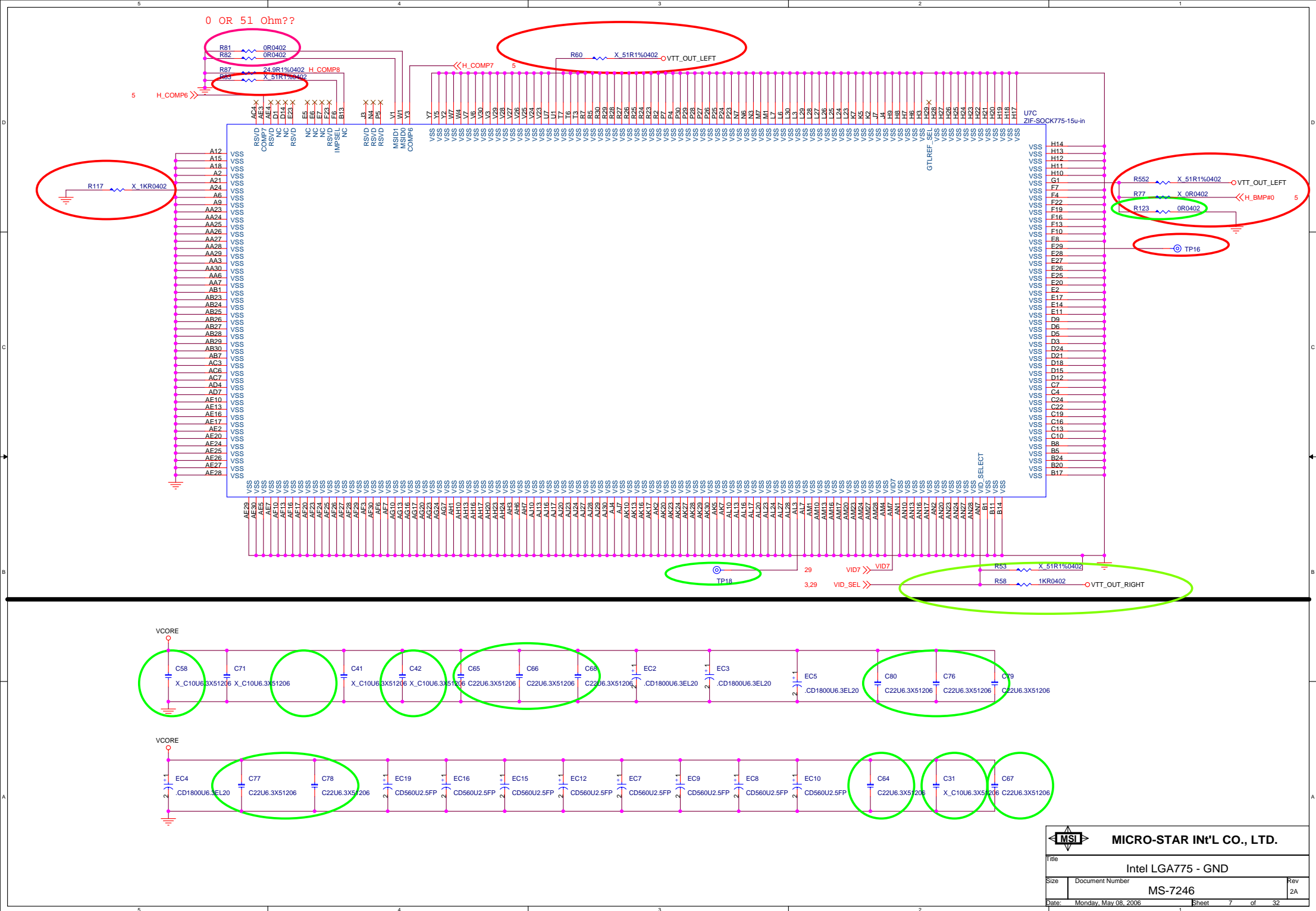


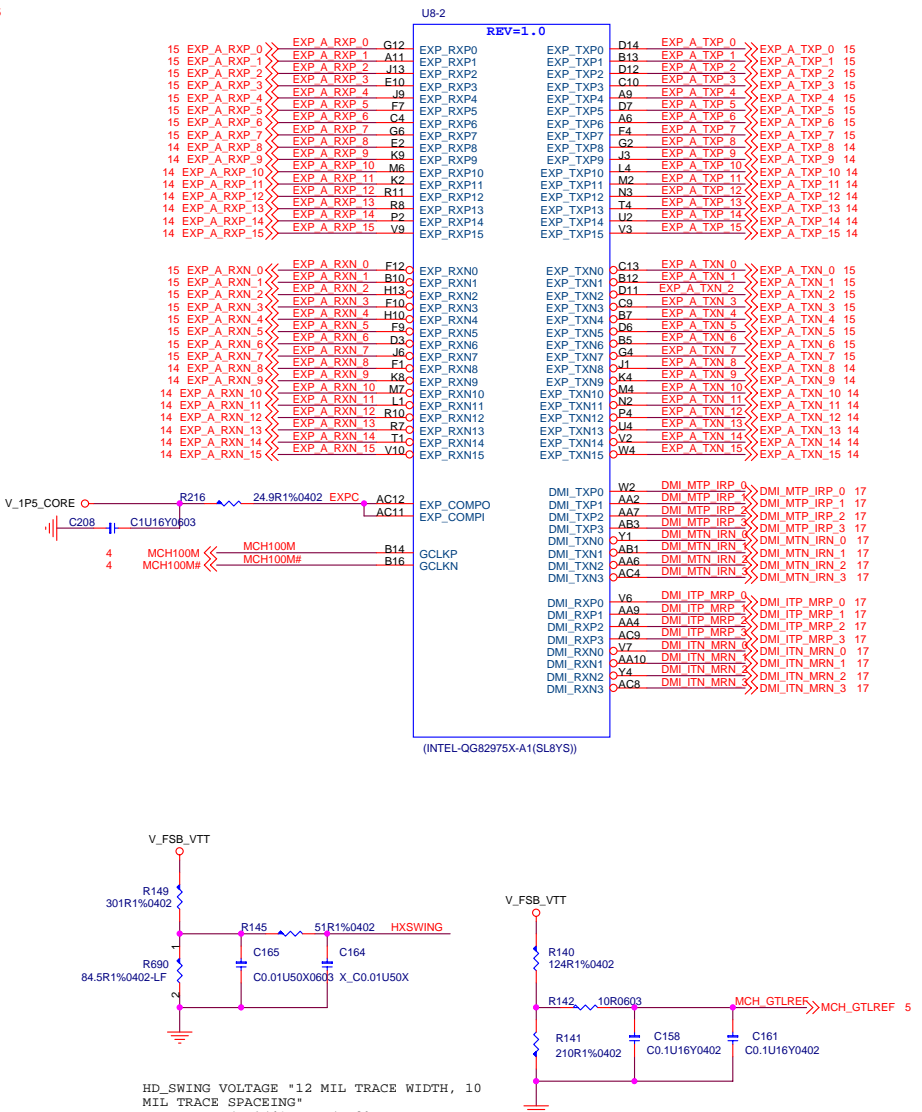
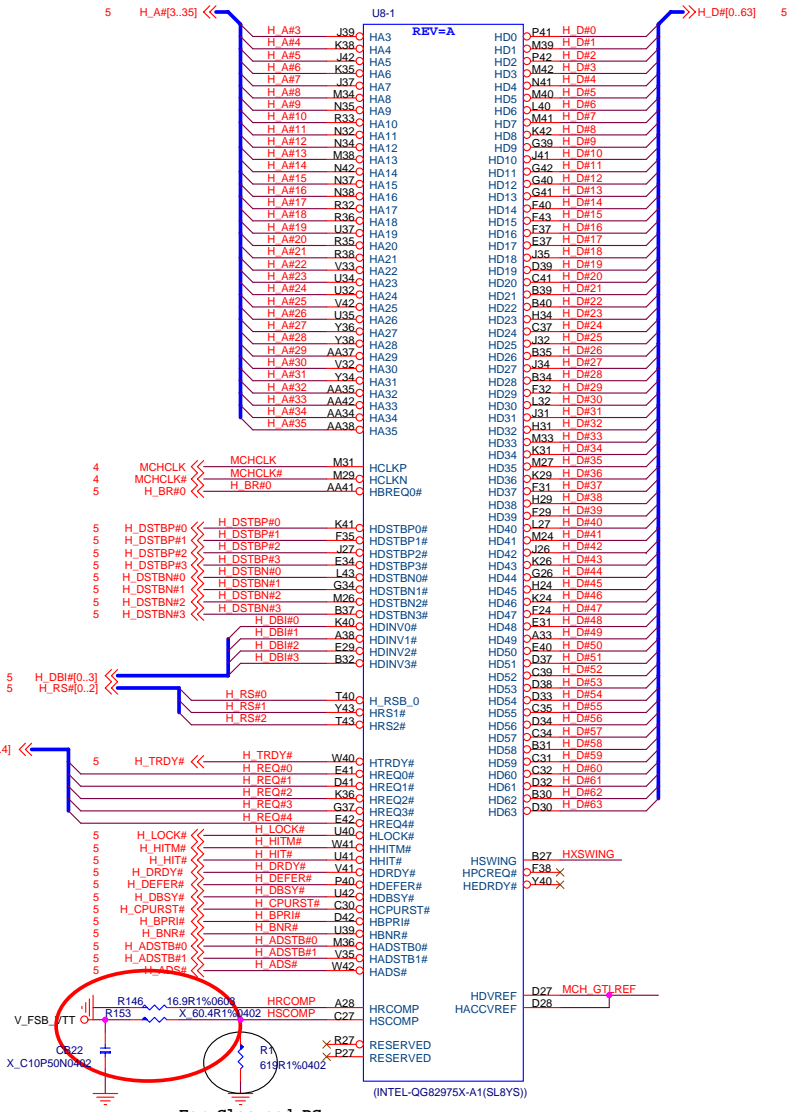
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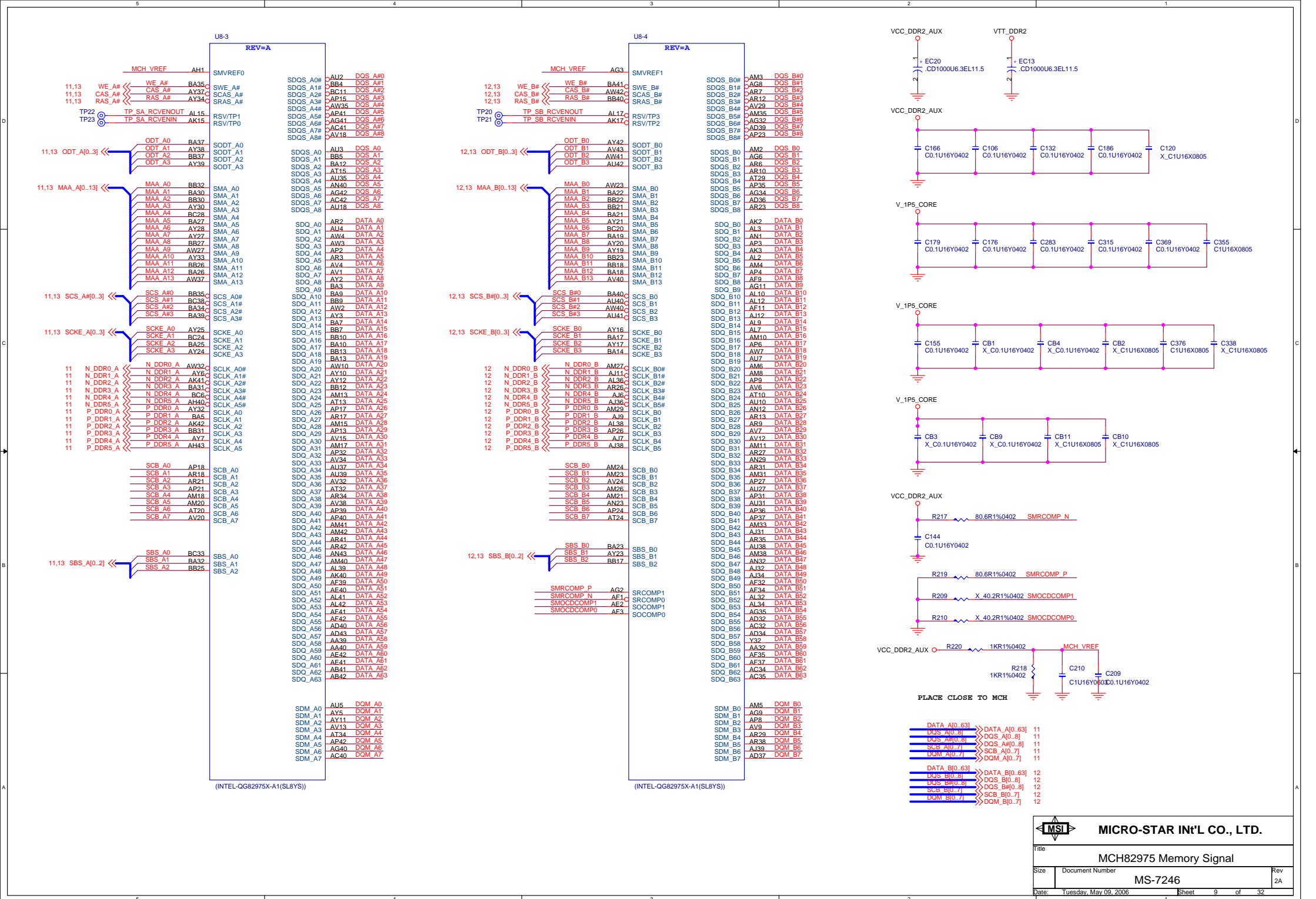
| | | | | | |
|-------|------------------------|--|----------------|---|-------|
| Title | | | Power Delivery | | |
| Size | Document Number | | | | Rev |
| | MS-7246 | | | | 2A |
| Date: | Monday, April 03, 2006 | | Sheet | 2 | of 32 |



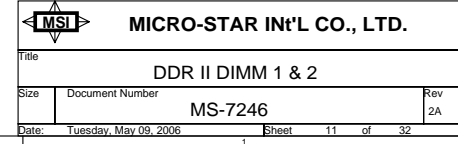




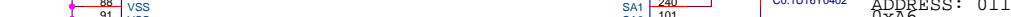


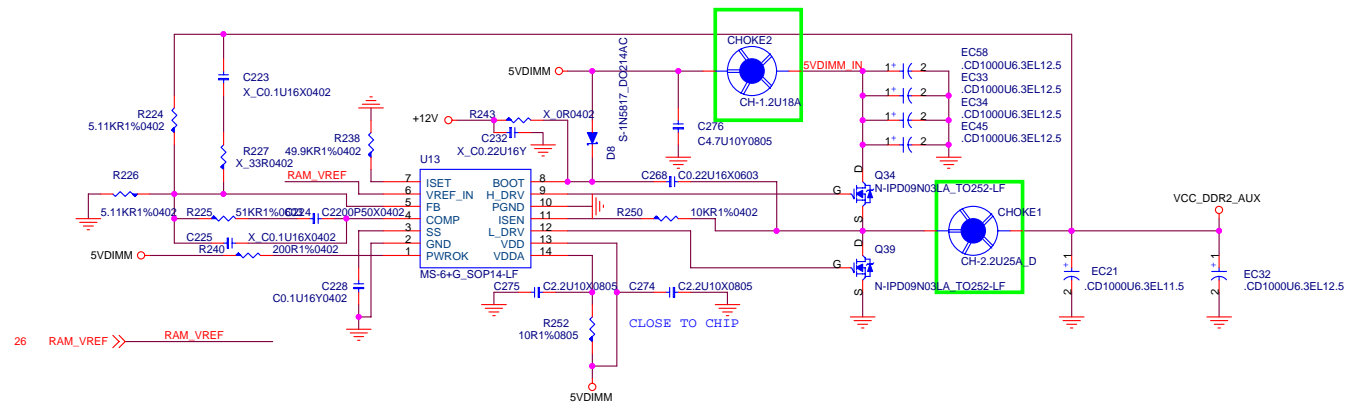
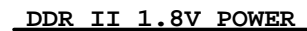
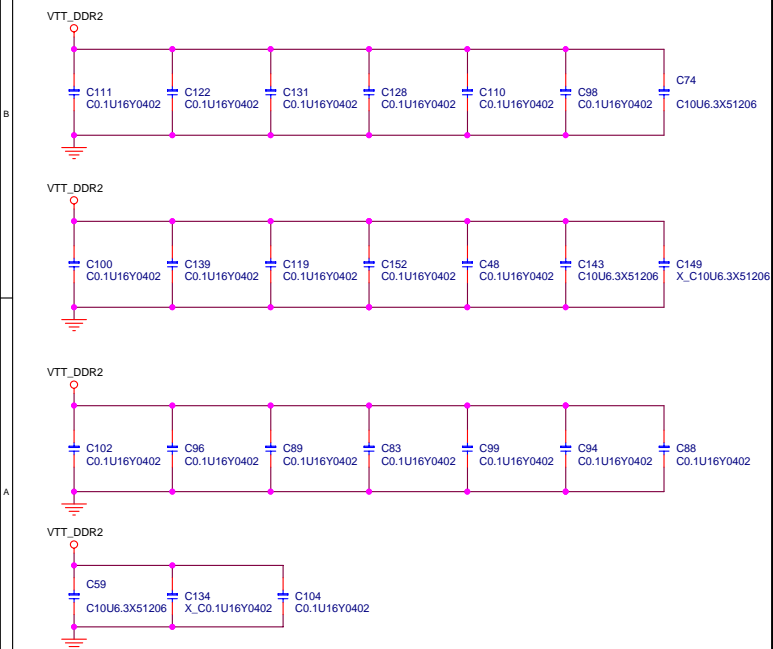


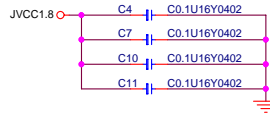
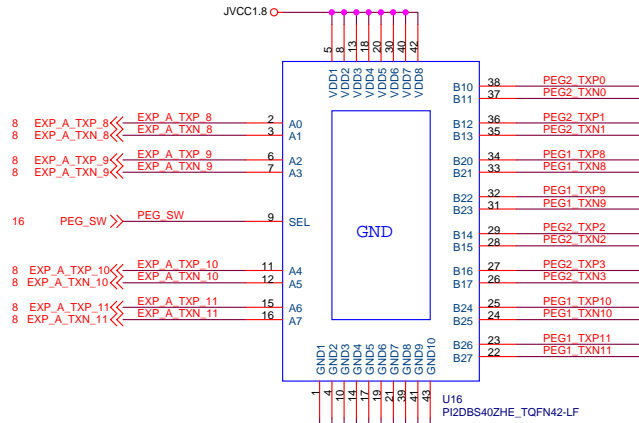
DDR2 DIMM2



1

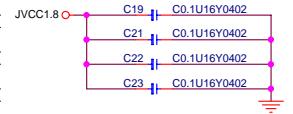
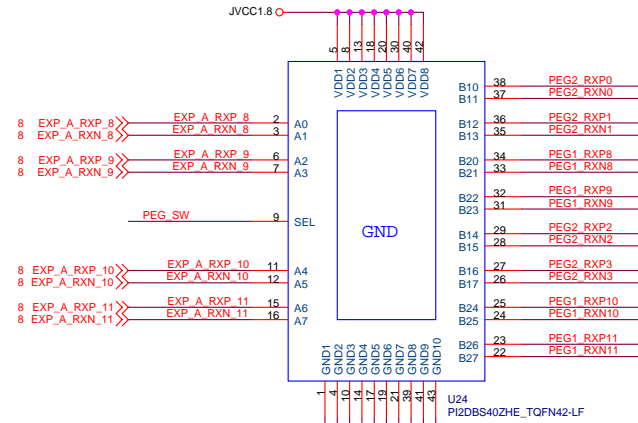
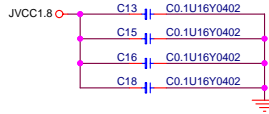
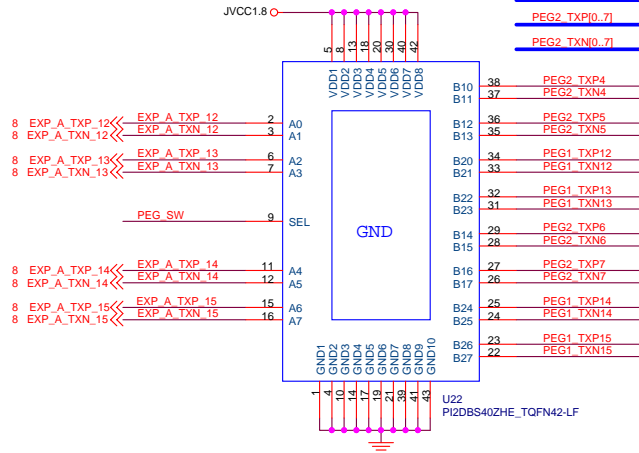




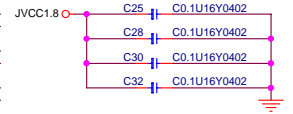
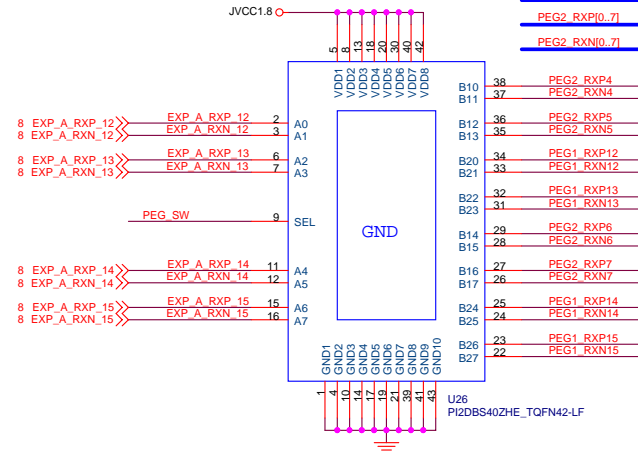


| PE_SLI_DET# | FUNCTION |
|-------------|-----------|
| H | An to B2n |
| L | An to B1n |

PEG1_TXP[8..15] << PEG1_TXP[8..15] 15
 PEG1_TXN[8..15] << PEG1_TXN[8..15] 15
 PEG2_TXP[0..7] << PEG2_TXP[0..7] 16
 PEG2_TXN[0..7] << PEG2_TXN[0..7] 16

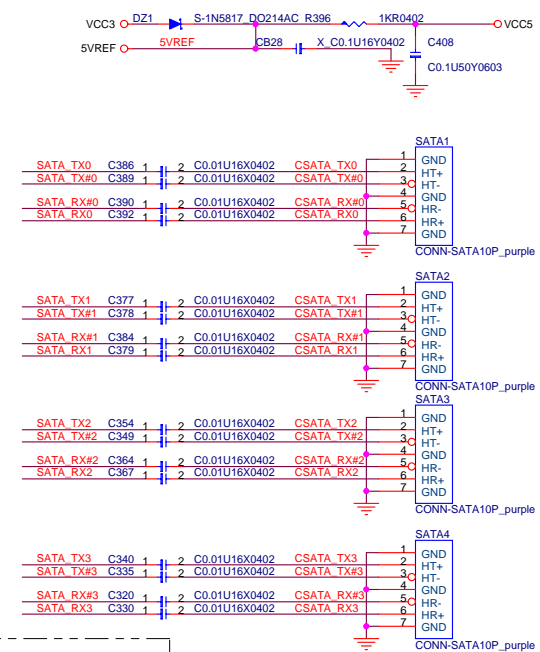
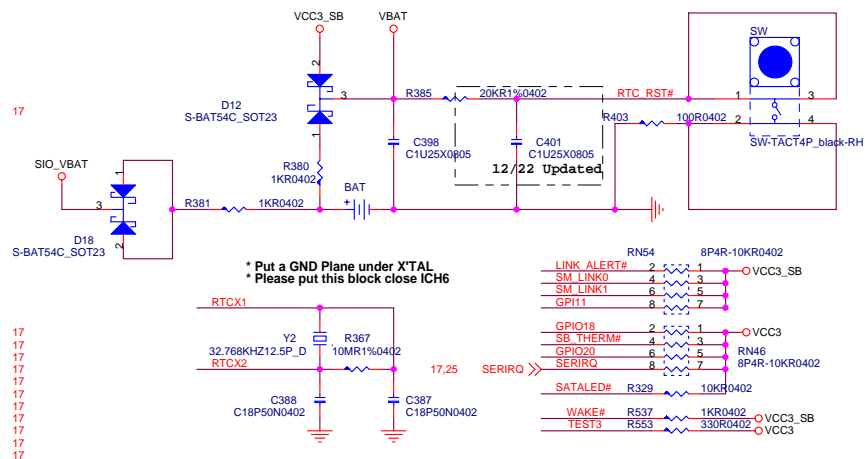
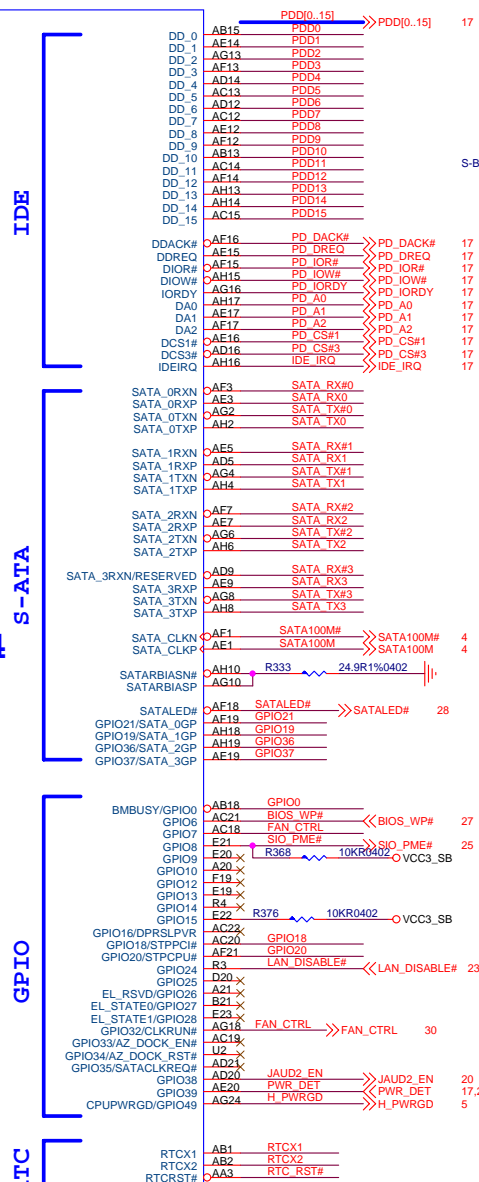
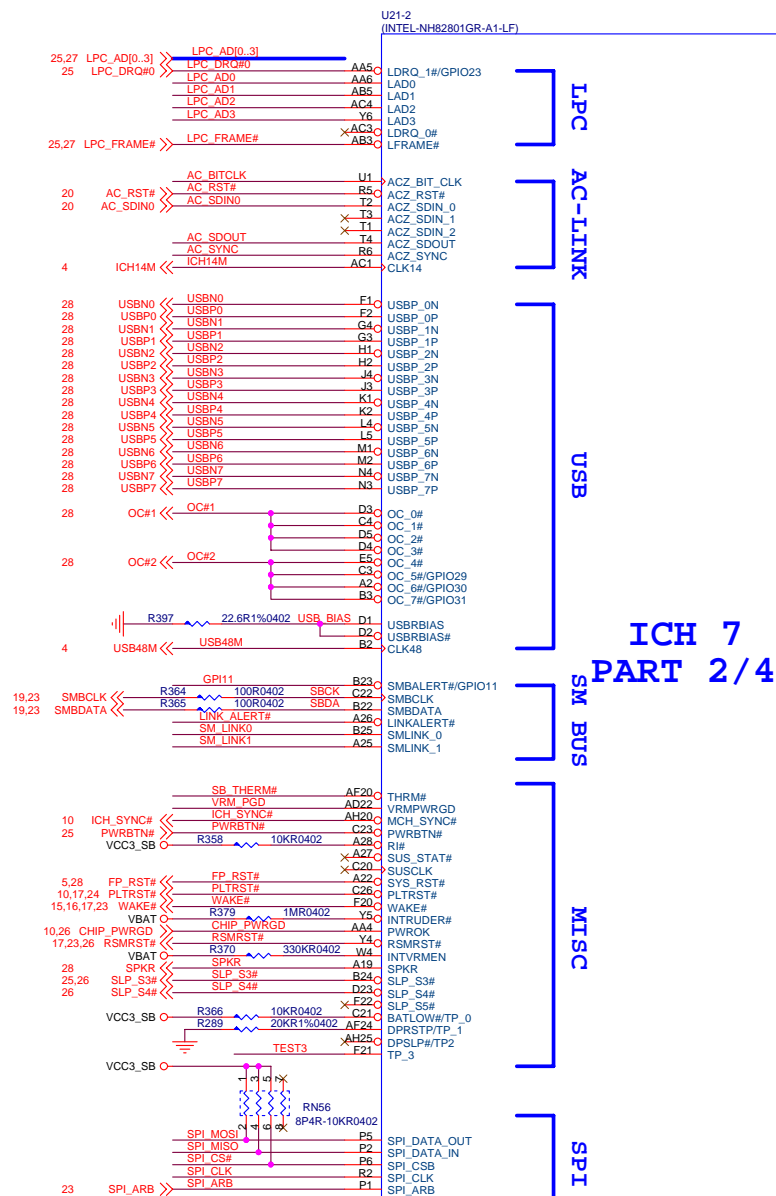


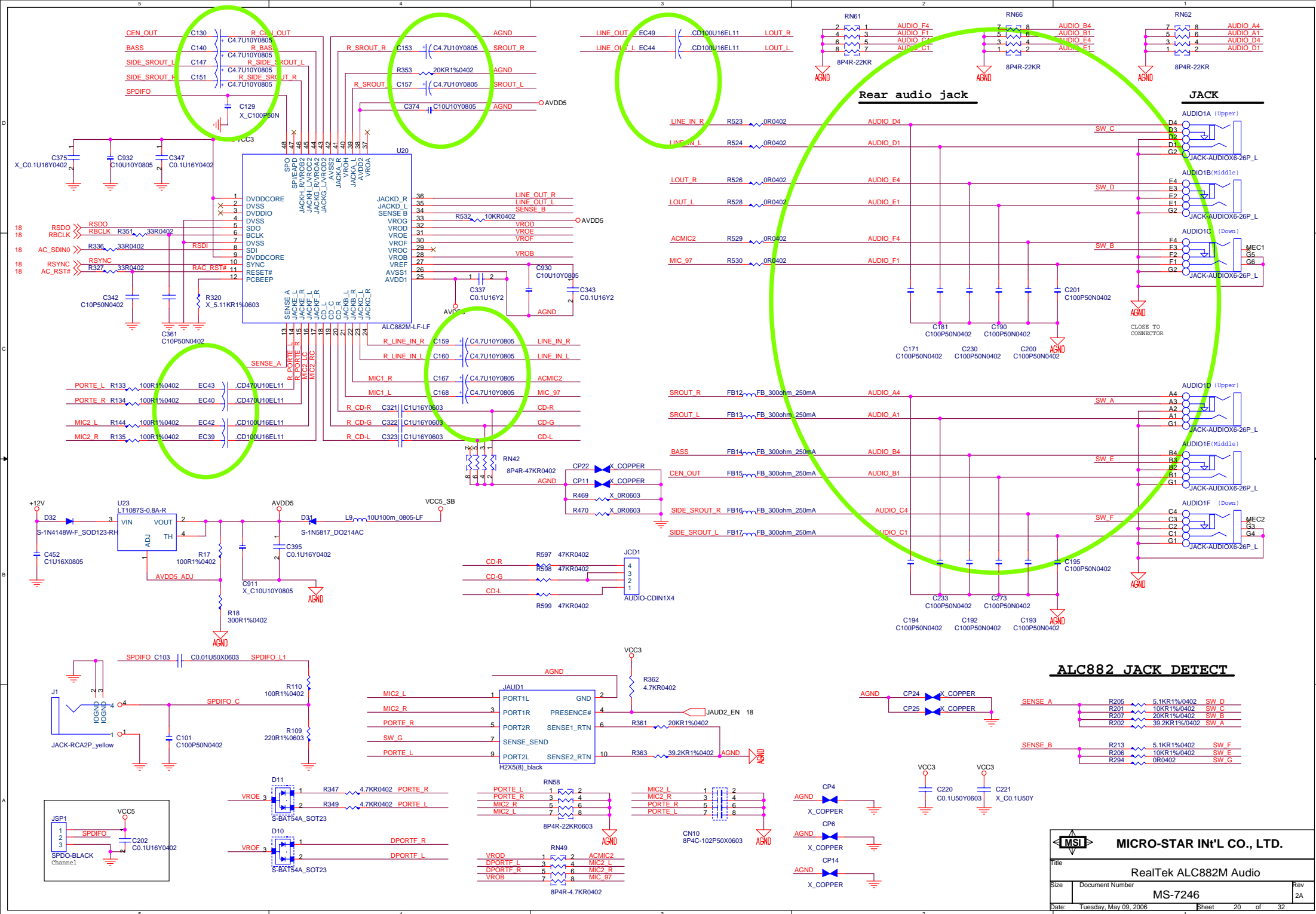
PEG1_RXP[8..15] << PEG1_RXP[8..15] 15
 PEG1_RXN[8..15] << PEG1_RXN[8..15] 15
 PEG2_RXP[0..7] << PEG2_RXP[0..7] 16
 PEG2_RXN[0..7] << PEG2_RXN[0..7] 16



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| | | |
|---------------------|----------------------------|----------------|
| Title PEG Switch | | |
| Size | Document Number MS-7246 | Rev 2A |
| Date | Tuesday, May 09, 2006 | Sheet 14 of 32 |

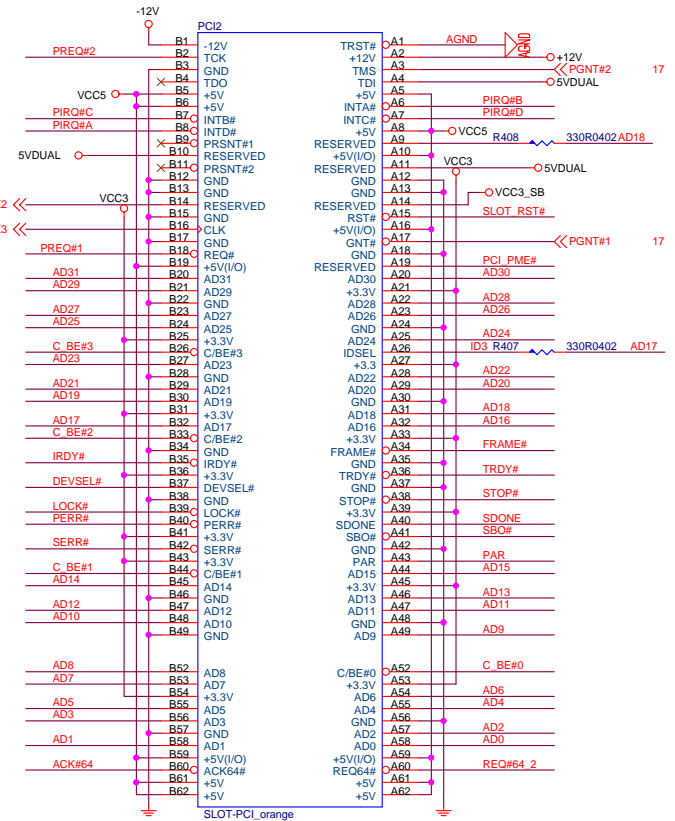
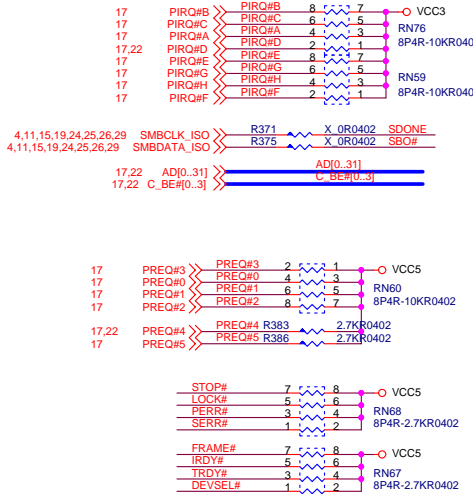
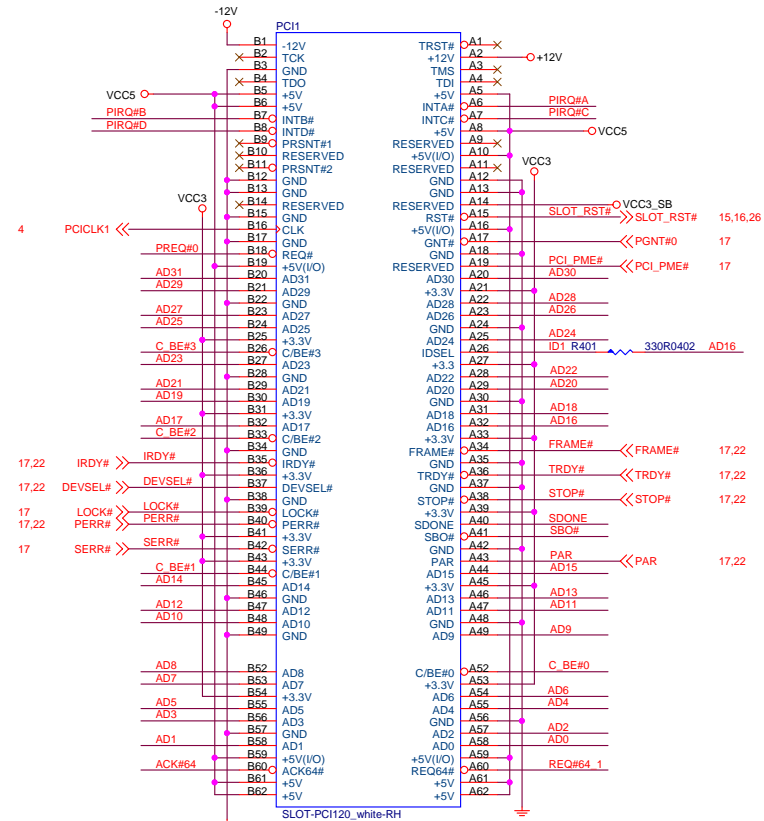




PCI SLOT 1 (PCI VER: 2.2 COMPLY)

PCI PULL-UP / DOWN RESISTORS

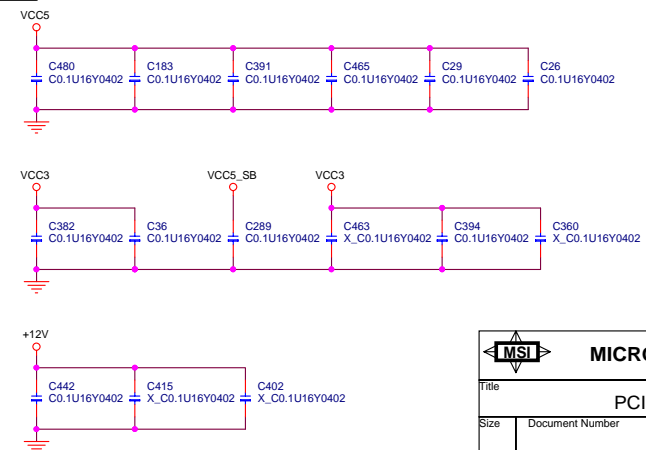
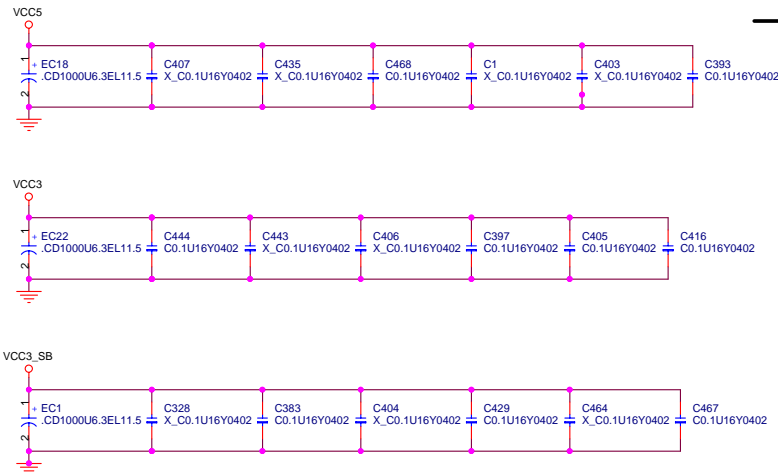
PCI SLOT 2 (PCI VER: 2.2 COMPLY)



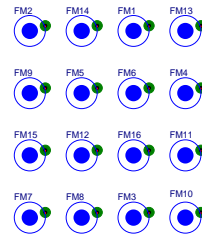
IDSEL = AD16
MASTER = PREQ#1
PIRQ#A

IDSEL = AD17 IDSEL = AD18
MASTER = PREQ#1 MASTER = PREQ#2
PIRQ#B

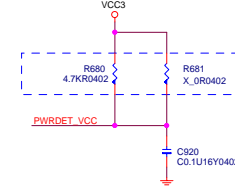
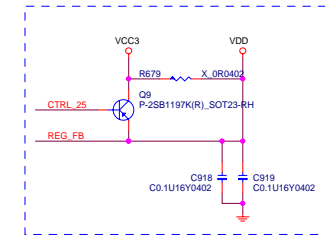
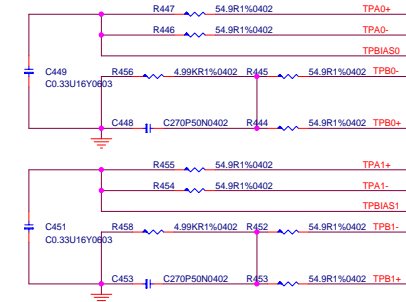
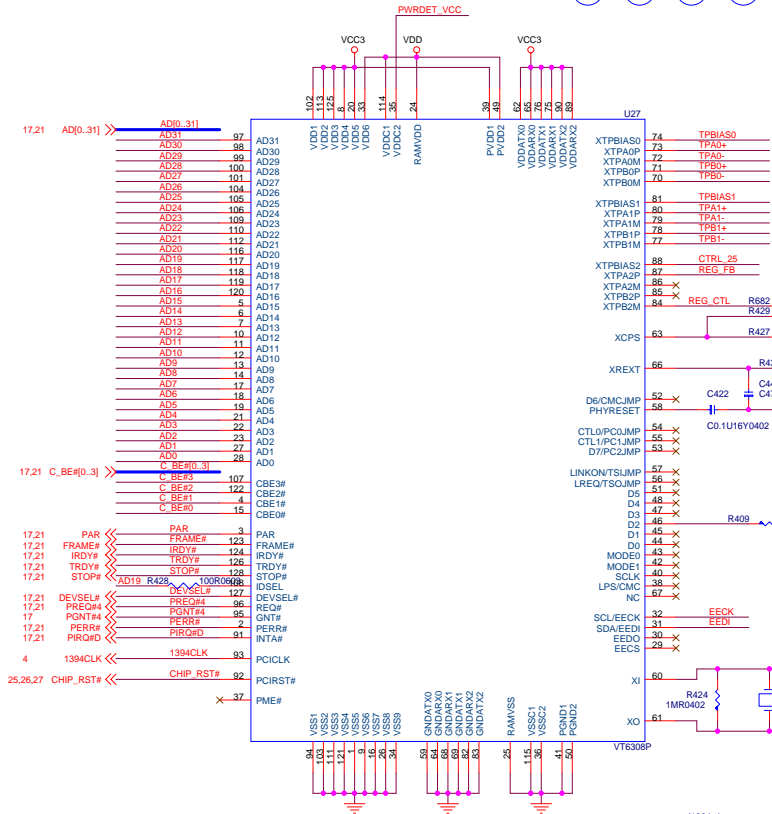
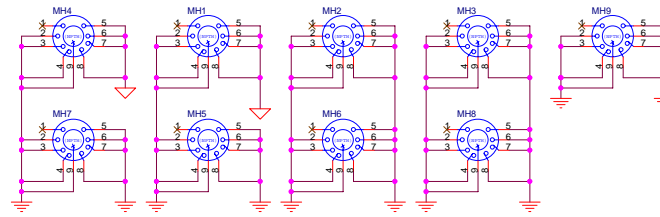
PCI SLOT DECOUPLING CAPACITORS



Optics Orientation Holes

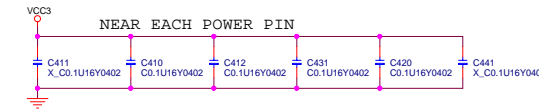
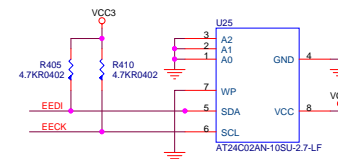
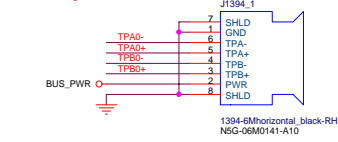
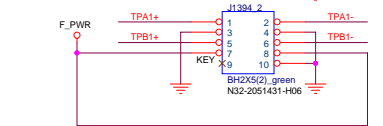


Mounting Holes

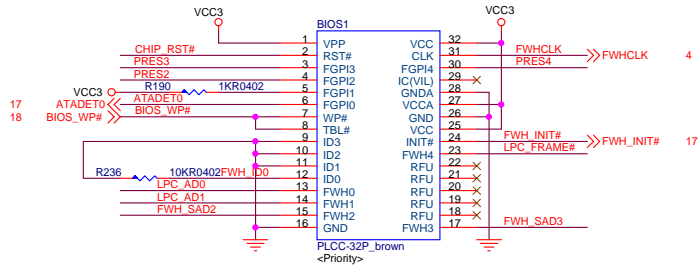


| 1394 CHIP | PWRDET_VCC | REG_CTL | VDD POWER |
|-----------|------------|---------|-----------|
| VT6307 | R681 | X | R679 |
| VT6308P | R680 | R682 | Q9 |

| POWER Pin | | |
|-----------|--------|------------|
| Pin | VT6307 | VT6308P |
| 84 | NC | REG_CTL |
| 87 | NC | REG_FB |
| 88 | NC | CTRL_25 |
| 35 | VCC | PWRDET_VCC |
| 39 | PVD | VCC |
| 49 | PVD | VDD |
| 24 | VCC | VDD |
| 114 | VCC | VDD |
| 33 | VCC | VDD |

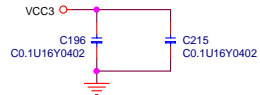


Firmware Hub (FWH)

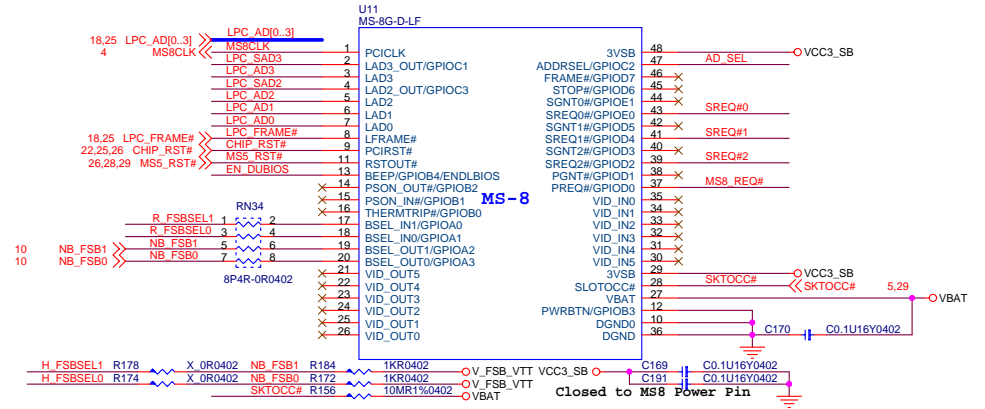
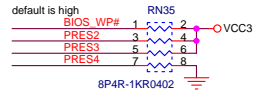


FWH DECOUPLING CAPACITORS

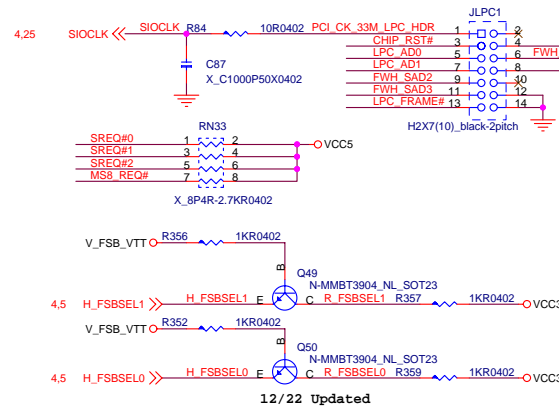
Place Cap. as Close to FWH< 350 mil



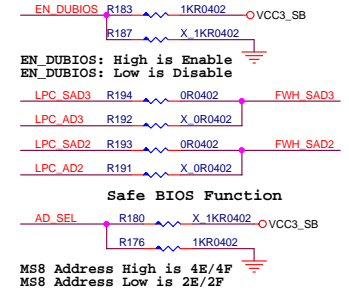
FWH Resistors



If you place the jumper very close to FWH bios socket, please use the same clock with FWH. But if you can not place it so close, please use another clock to support it.



12/22 Updated



| H_FSBSEL0 | H_FSBSEL1 | BSEL_CT0 | BSEL_CT1 | NB_FSB0 | NB_FSB1 | BS_Change |
|-----------|-----------|----------|----------|---------|---------|-----------|
| 0 | 0 | 0 | 0 | 1 | 1 | 133Mhz |
| 0 | 1 | 0 | 0 | 1 | 0 | |
| 1 | 0 | 0 | 0 | 0 | 1 | 200Mhz |
| 1 | 1 | 0 | 0 | 0 | 0 | 266Mhz |
| 0 | 0 | 0 | 1 | 1 | 0 | |
| 0 | 1 | 0 | 1 | 1 | 1 | 133Mhz |
| 1 | 0 | 0 | 1 | 0 | 0 | 266Mhz |
| 1 | 1 | 0 | 1 | 0 | 1 | 200Mhz |
| 0 | 0 | 1 | 0 | 0 | 1 | 200Mhz |
| 0 | 1 | 1 | 0 | 0 | 0 | 266Mhz |
| 1 | 0 | 1 | 0 | 1 | 1 | 133Mhz |
| 1 | 1 | 1 | 0 | 1 | 0 | |
| 0 | 0 | 1 | 1 | 0 | 0 | 266Mhz |
| 0 | 1 | 1 | 1 | 0 | 1 | 200Mhz |
| 1 | 0 | 1 | 1 | 1 | 0 | |
| 1 | 1 | 1 | 1 | 1 | 1 | 133Mhz |

CK410 Specification

| NB_FSB0 | NB_FSB1 | NB_FSB_OUT |
|---------|---------|------------|
| 0 | 0 | 266Mhz |
| 0 | 1 | 200Mhz |
| 1 | 1 | 133Mhz |

| | | |
|-----------------------------------|-----------|--------|
| MICRO-STAR INT'L CO., LTD. | | |
| Title: MS-8 & FirmwareHub | | |
| Size: Document Number | Rev: 2A | |
| MS-7246 | | |
| Date: Tuesday, May 09, 2006 | Sheet: 27 | of: 32 |

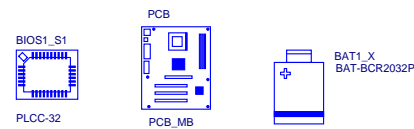
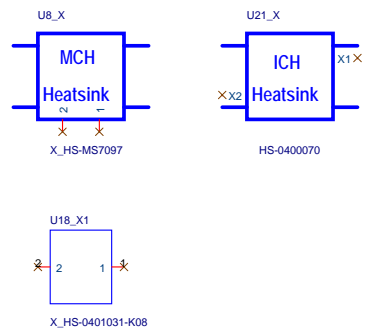
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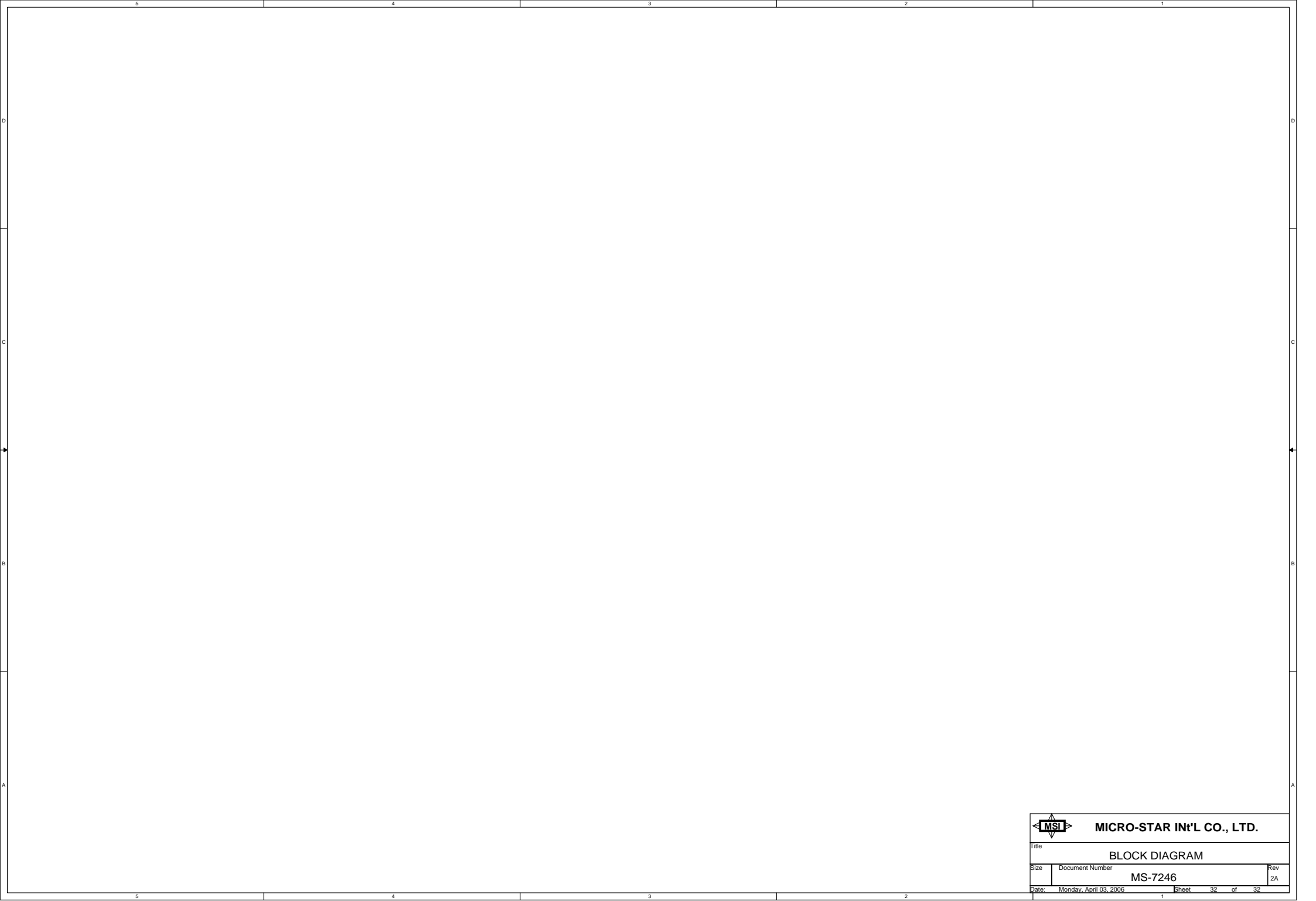
The image displays a detailed PCB layout for a USB connector. The layout includes several USB ports (USB0, USB1, USB2, USB3, USB4, USB5, USB6, USB7, USBP0, USBP1, USBP2, USBP3, USBP4, USBP5, USBP6, USBP7) and a LAN connector (LAN_USB2A). The components are labeled with their values and part numbers, such as resistors (R465, R466, R467, R391, R388), capacitors (C473, C475, C476, C466, C467, C477, C478, C479, C480, C481, C482, C483, C484, C485, C486, C487, C488, C489, C490, C491, C492, C493, C494, C495, C496, C497, C498, C499, C500, C501, C502, C503, C504, C505, C506, C507, C508, C509, C510, C511, C512, C513, C514, C515, C516, C517, C518, C519, C520, C521, C522, C523, C524, C525, C526, C527, C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540, C541, C542, C543, C544, C545, C546, C547, C548, C549, C550, C551, C552, C553, C554, C555, C556, C557, C558, C559, C560, C561, C562, C563, C564, C565, C566, C567, C568, C569, C570, C571, C572, C573, C574, C575, C576, C577, C578, C579, C580, C581, C582, C583, C584, C585, C586, C587, C588, C589, C590, C591, C592, C593, C594, C595, C596, C597, C598, C599, C600, C601, C602, C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C616, C617, C618, C619, C620, C621, C622, C623, C624, C625, C626, C627, C628, C629, C630, C631, C632, C633, C634, C635, C636, C637, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C652, C653, C654, C655, C656, C657, C658, C659, C660, C661, C662, C663, C664, C665, C666, C667, C668, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C682, C683, C684, C685, C686, C687, C688, C689, C690, C691, C692, C693, C694, C695, C696, C697, C698, C699, C700, C701, C702, C703, C704, C705, C706, C707, C708, C709, C710, C711, C712, C713, C714, C715, C716, C717, C718, C719, C720, C721, C722, C723, C724, C725, C726, C727, C728, C729, C730, C731, C732, C733, C734, C735, C736, C737, C738, C739, C740, C741, C742, C743, C744, C745, C746, C747, C748, C749, C750, C751, C752, C753, C754, C755, C756, C757, C758, C759, C760, C761, C762, C763, C764, C765, C766, C767, C768, C769, C770, C771, C772, C773, C774, C775, C776, C777, C778, C779, C780, C781, C782, C783, C784, C785, C786, C787, C788, C789, C790, C791, C792, C793, C794, C795, C796, C797, C798, C799, C800, C801, C802, C803, C804, C805, C806, C807, C808, C809, C810, C811, C812, C813, C814, C815, C816, C817, C818, C819, C820, C821, C822, C823, C824, C825, C826, C827, C828, C829, C830, C831, C832, C833, C834, C835, C836, C837, C838, C839, C840, C841, C842, C843, C844, C845, C846, C847, C848, C849, C850, C851, C852, C853, C854, C855, C856, C857, C858, C859, C860, C861, C862, C863, C864, C865, C866, C867, C868, C869, C870, C871, C872, C873, C874, C875, C876, C877, C878, C879, C880, C881, C882, C883, C884, C885, C886, C887, C888, C889, C890, C891, C892, C893, C894, C895, C896, C897, C898, C899, C900, C901, C902, C903, C904, C905, C906, C907, C908, C909, C910, C911, C912, C913, C914, C915, C916, C917, C918, C919, C920, C921, C922, C923, C924, C925, C926, C927, C928, C929, C930, C931, C932, C933, C934, C935, C936, C937, C938, C939, C940, C941, C942, C943, C944, C945, C946, C947, C948, C949, C950, C951, C952, C953, C954, C955, C956, C957, C958, C959, C960, C961, C962, C963, C964, C965, C966, C967, C968, C969, C970, C971, C972, C973, C974, C975, C976, C977, C978, C979, C980, C981, C982, C983, C984, C985, C986, C987, C988, C989, C990, C991, C992, C993, C994, C995, C996, C997, C998, C999, C1000, C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1009, C1010, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018, C1019, C1020, C1021, C1022, C1023, C1024, C1025, C1026, C1027, C1028, C1029, C1030, C1031, C1032, C1033, C1034, C1035, C1036, C1037, C1038, C1039, C1040, C1041, C1042, C1043, C1044, C1045, C1046, C1047, C1048, C1049, C1050, C1051, C1052, C1053, C1054, C1055, C1056, C1057, C1058, C1059, C1060, C1061, C1062, C1063, C1064, C1065, C1066, C1067, C1068, C1069, C1070, C1071, C1072, C1073, C1074, C1075, C1076, C1077, C1078, C1079, C1080, C1081, C1082, C1083, C1084, C1085, C1086, C1087, C1088, C1089, C1090, C1091, C1092, C1093, C1094, C1095, C1096, C1097, C1098, C1099, C1100, C1101, C1102, C1103, C1104, C1105, C1106, C1107, C1108, C1109, C1110, C1111, C1112, C1113, C1114, C1115, C1116, C1117, C1118, C1119, C1120, C1121, C1122, C1123, C1124, C1125, C1126, C1127, C1128, C1129, C1130, C1131, C1132, C1133, C1134, C1135, C1136, C1137, C1138, C1139, C1140, C1141, C1142, C1143, C1144, C1145, C1146, C1147, C1148, C1149, C1150, C1151, C1152, C1153, C1154, C1155, C1156, C1157, C1158, C1159, C1160, C1161, C1162, C1163, C1164, C1165, C1166, C1167, C1168, C1169, C1170, C1171, C1172, C1173, C1174, C1175, C1176, C1177, C1178, C1179, C1180, C1181, C1182, C1183, C1184, C1185, C1186, C1187, C1188, C1189, C1190, C1191, C1192, C1193, C1194, C1195, C1196, C1197, C1198, C1199, C1200, C1201, C1202, C1203, C1204, C1205, C1206, C1207, C1208, C1209, C1210, C1211, C1212, C1213, C1214, C1215, C1216, C1


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