

Milwaukee 10M

PreMP BUILD

2007 0212

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE	INVENTEC			
DESIGN					TITLE MW10M			
CHECK								
RESPONSIBLE								
SIZE = 3					SIZE	CODE	DOC. NUMBER	REV
FILE NAME : XXXX-XXXXXX-XX					A3	CS	1310A2120801	A02
P/N	XXXXXXXXXXXX				SHEET 1 OF 53			

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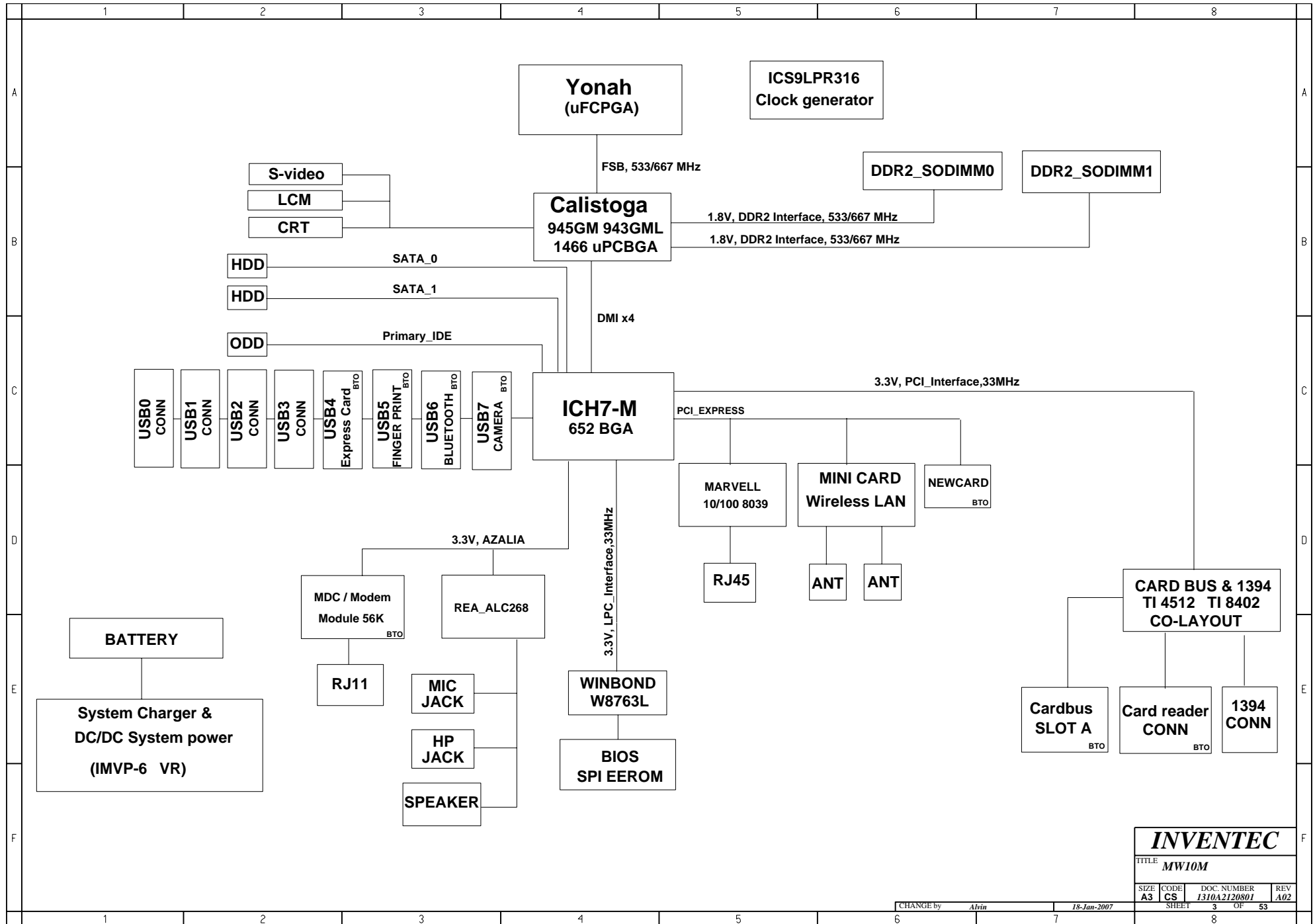
PAGE	PAGE
1.COVER PAGE	33.CARDBUS CONTROLLER
2.INDEX	34.PCMCIA CONN
3.BLOCK DIAGRAM	35.5 IN 1 CARD SLOT
4.POWER SEQUENCE BLOCK	36.1394 CONTROLLER
5-11.SYSTEM POWER	37.EXPRESS CARD CONN
12.CLOCK GENERATOR	38.LAN CONTROLLER
13.CPU Yonah1	39.RJ45 & TRANSFORMER
14.CPU Yonah2	40.WLAN
15.CPU Yonah3	41.SATA HDD1 CONN & SATA HDD2 CONN
16.FAN & THERMAL CONTROLLER	42.CAMERA & CIR & MDC & Fingerprint & Bluetooth
17.N/B Calistoga 1	43.ODD CONN
18.N/B Calistoga 2	44.USB CONN
19.N/B Calistoga 3	45.KBC
20.N/B Calistoga 4	46.K/B & TP/B CONN
21.N/B Calistoga 5	47.AZALIA CODEC
22.N/B Calistoga 6	48.AUDIO AMP & MIC & HP
23.DDR2 DIMM0	49.LED(M/B) & HOTKEY/B CONN
24.DDR2 DIMM1	50.PICK BUTTON BOARD
25.DDR DAMPING	51.KILL SWITCH& HALL SENSOR
26.CRT CONN	52.DRILL HOLE
27.S-VIDEO CONN	53.EMI
28.LCM CONN	
29.S/B ICH7 1	
30.S/B ICH7 2	
31.S/B ICH7 3	
32.S/B ICH7 4	

INVENTEC

TITLE **MW10M**

SIZE A3	CODE CS	DOC. NUMBER 1310A2120801	REV A02
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CHANGE by *Alvin* 12-Jan-2007



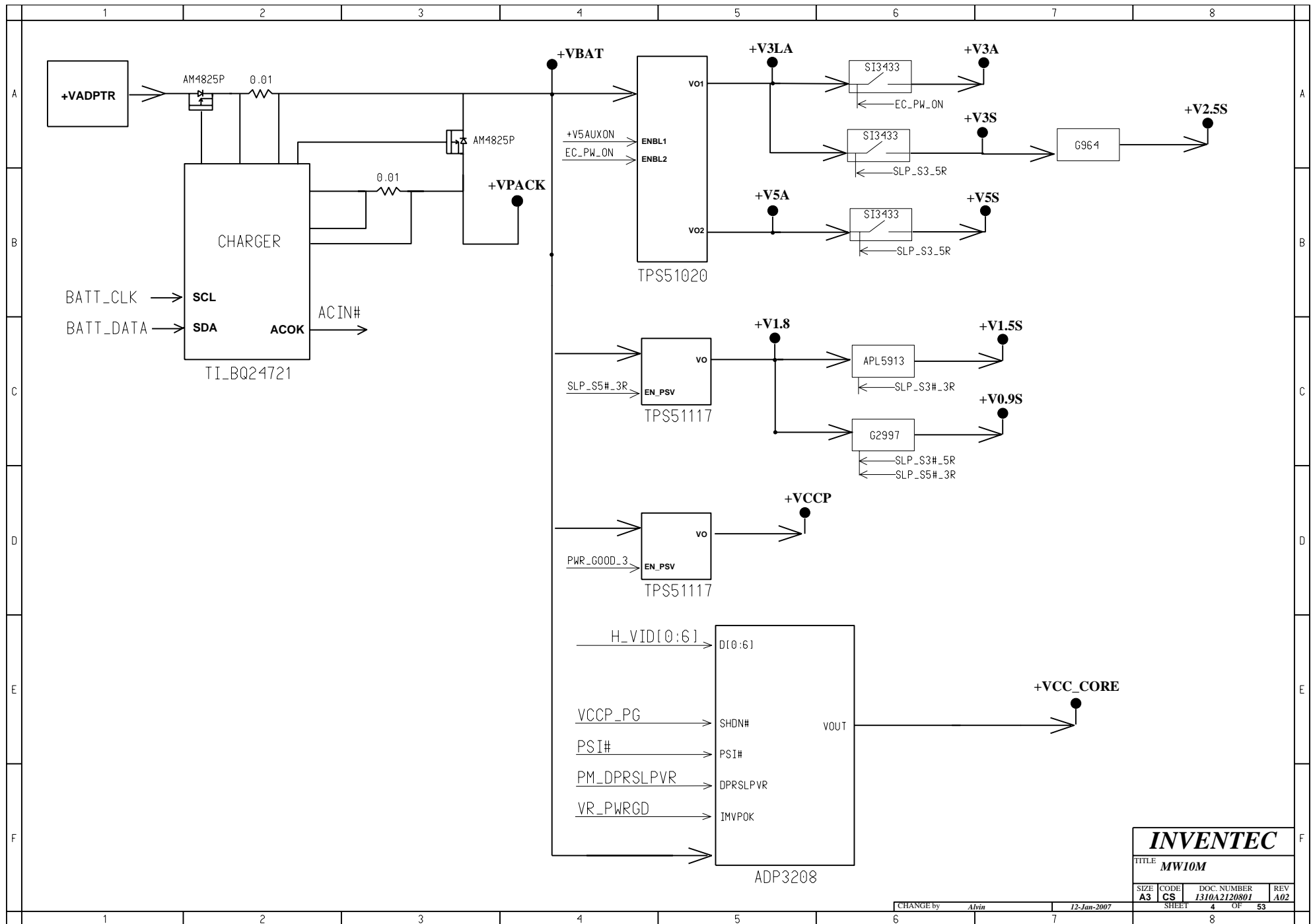
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TITLE **MW10M**

SIZE A3	CODE CS	DOC. NUMBER I310A2120801	REV A02
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CHANGE by *Alvin* 18-Jan-2007

SHEET 3 OF 53



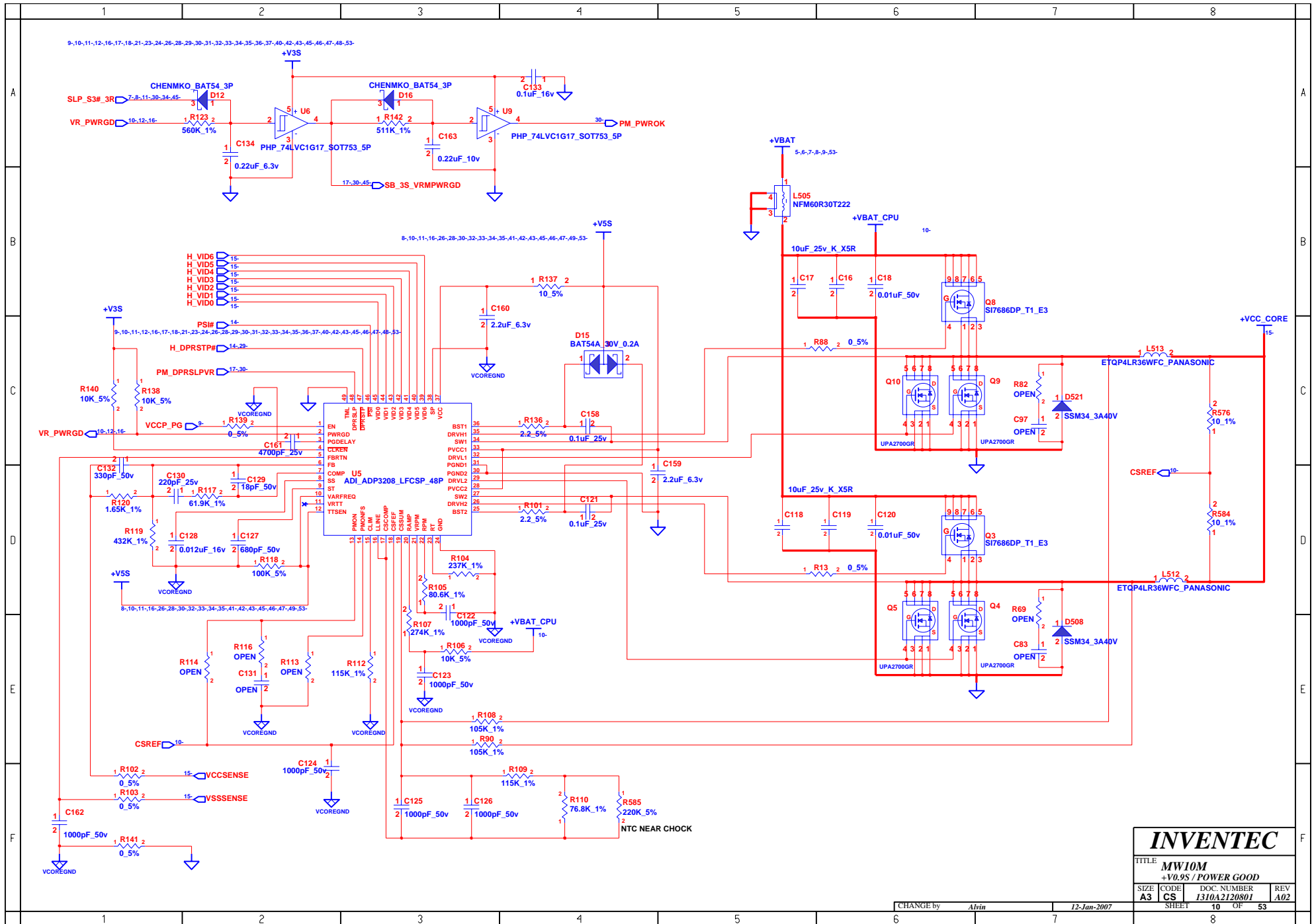
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TITLE
MW10M

SIZE A3	CODE CS	DOC. NUMBER 1310A2120801	REV A02
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CHANGE by *Alvin* 12-Jan-2007

SHEET 4 OF 53

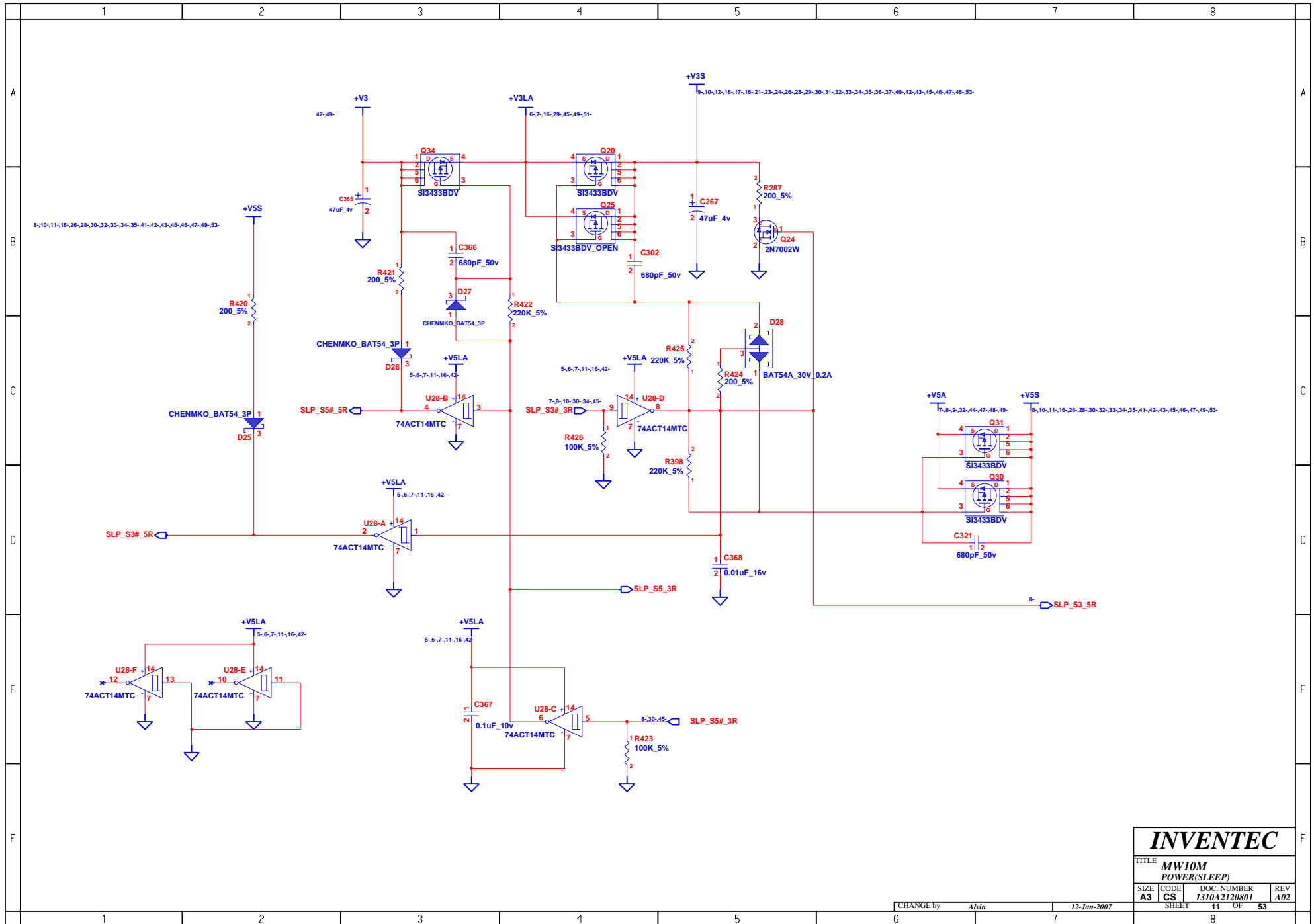


INVENTEC

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MW10M			
+V0.9S / POWER GOOD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2120801	A02

CHANGE by Alvin 12-Jan-2007

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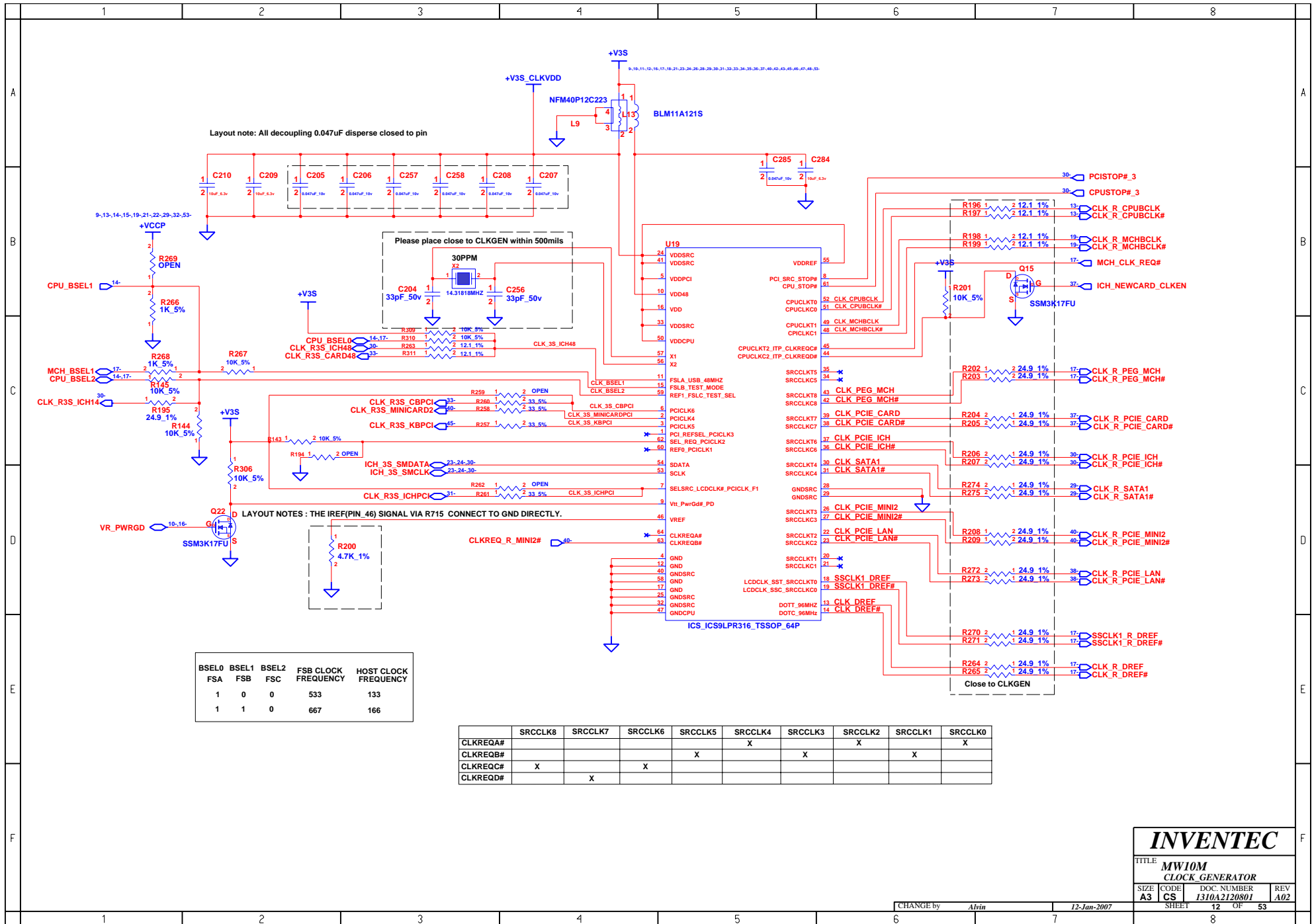


INVENTEC

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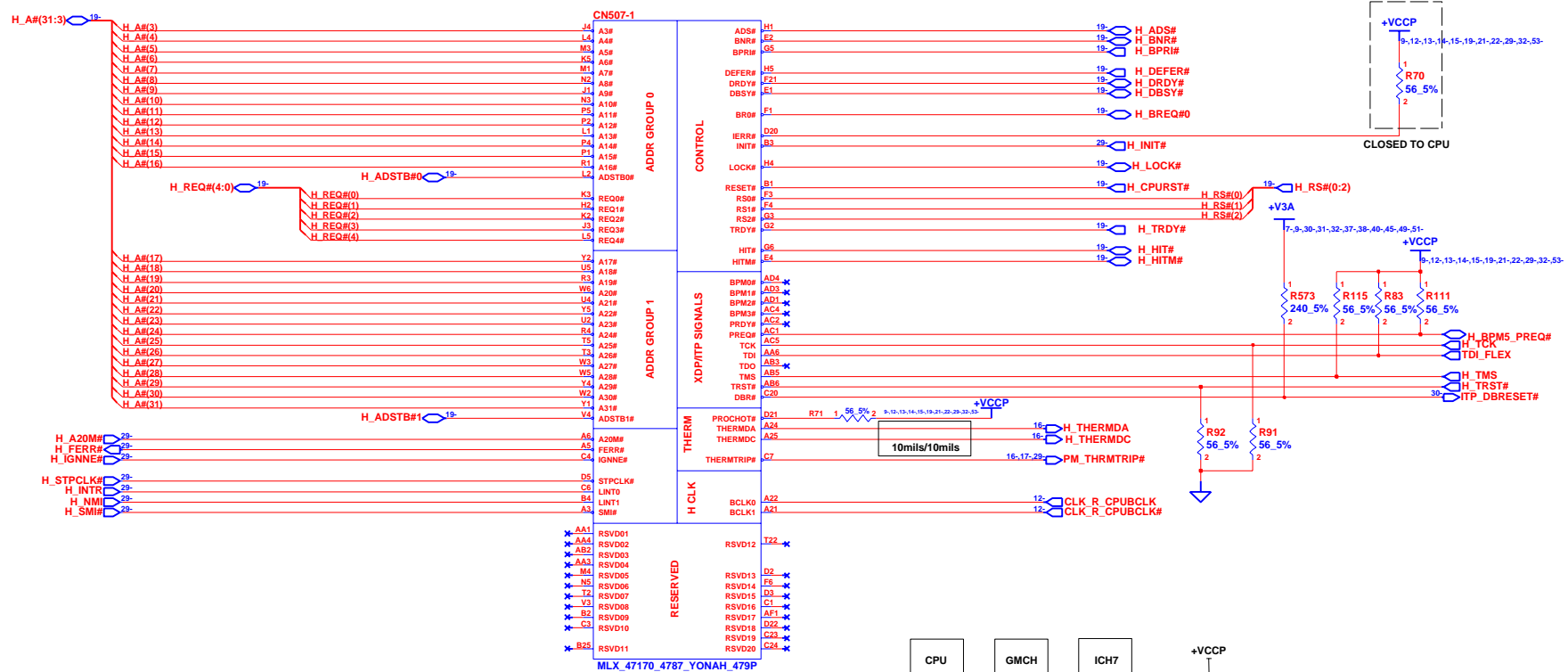
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INVENTEC

TITLE
**MW10M
CLOCK GENERATOR**

SIZE CODE A3 DOC. NUMBER 1310A2120801 REV A02

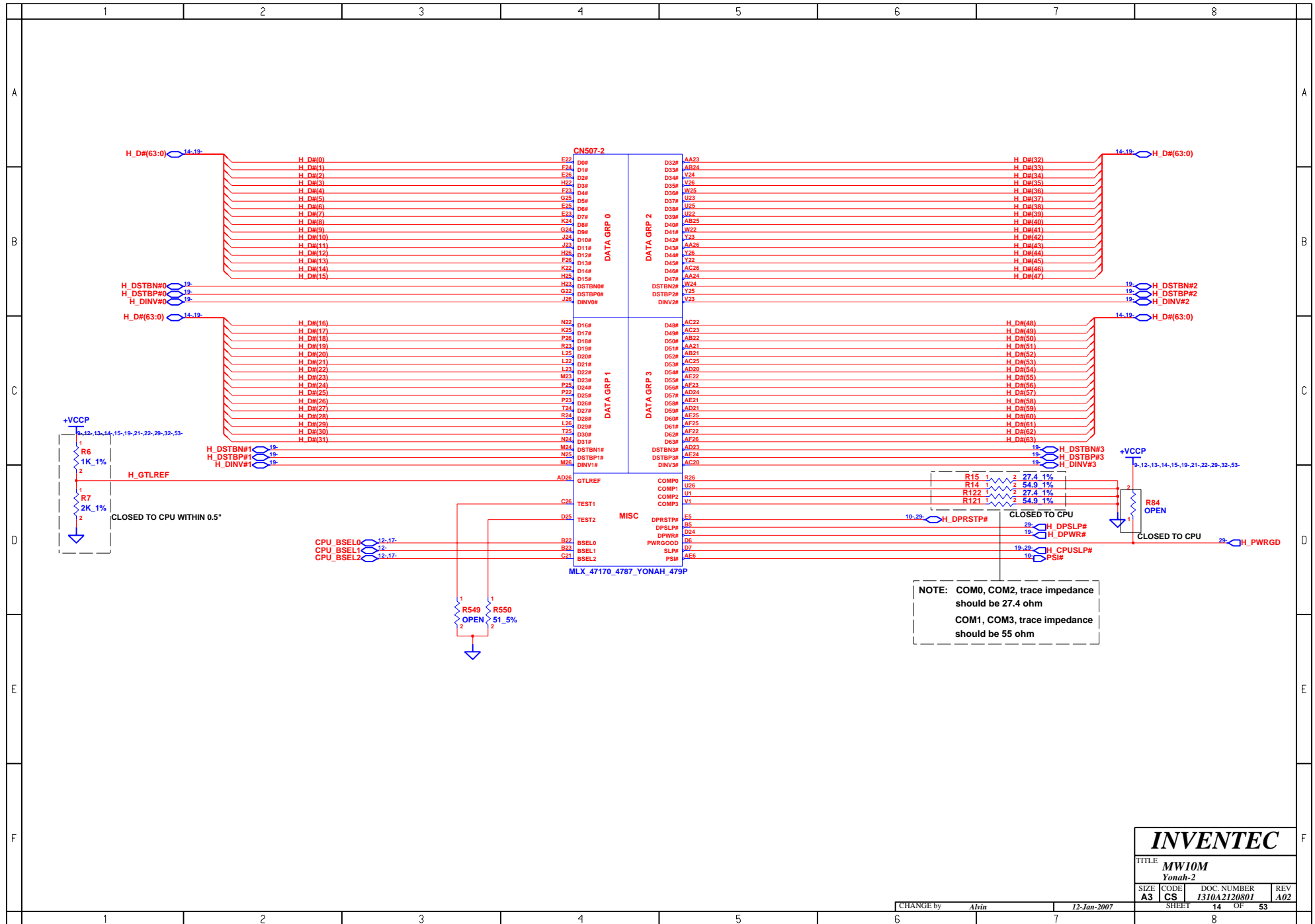


INVENTEC

TITLE			
MW10M			
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SIZE	CODE	DOC. NUMBER	REV
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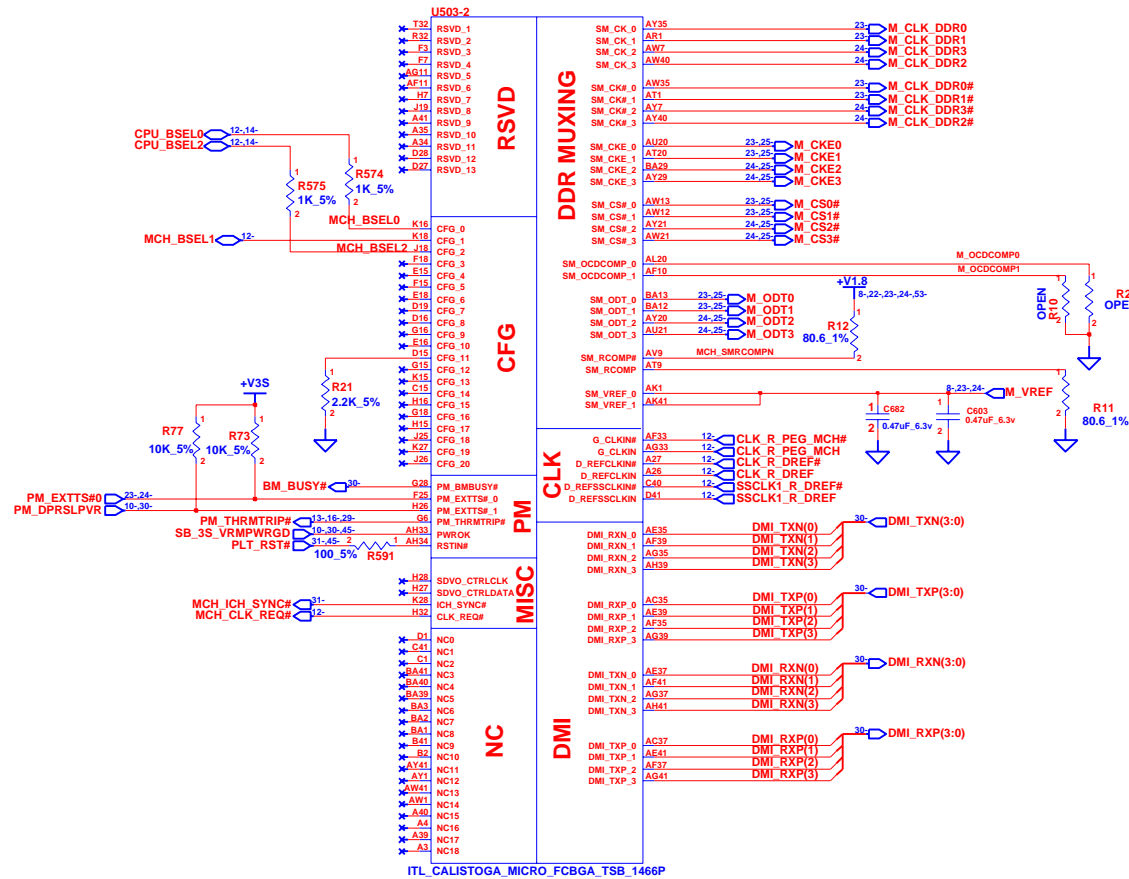
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TITLE
MW10M
Yonah-2

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CHANGE by Alvin 12-Jan-2007

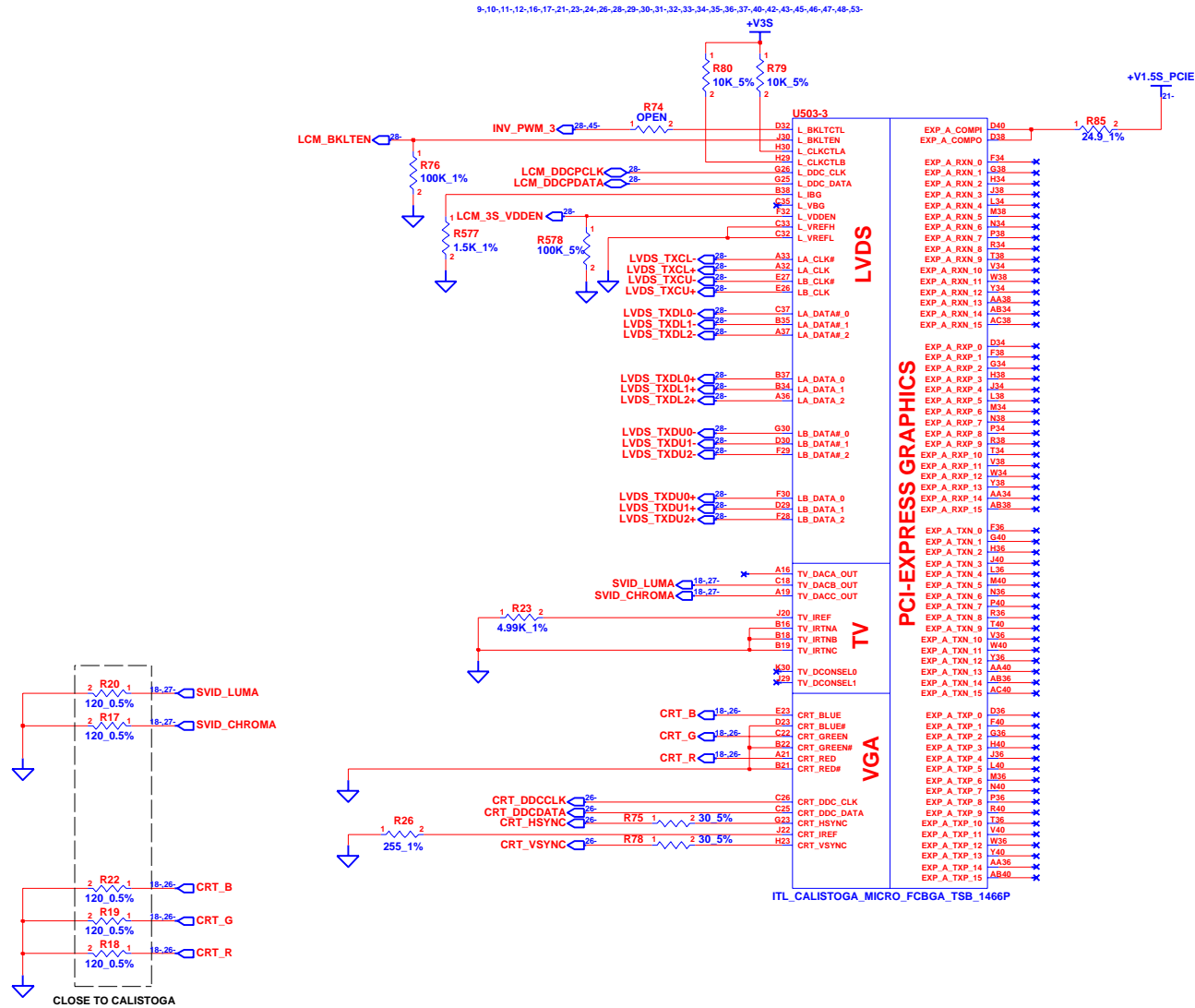
SHEET 14 OF 53



MCH_CFG(18) (VCC Select)	LOW=1.05V HIGH=1.5V	MCH_CFG(19) (DMI LANE REVERSAL)	LOW=Normal HIGH=LANES REVERSED
MCH_CFG(20) (PCIe Backward Interoperability mode)	LOW=Only SDVO or PCIe x1 is operational HIGH=SDVO and PCIe x1 are operating simultaneously via the PEG port		

MCH_CFG(5)	LOW=DM1x2 HIGH=DM1x4	MCH_CFG(6) (DDR)	LOW=Moby Dick HIGH=Calistoga	MCH_CFG(7) (CPU Strap)	LOW=RSVD HIGH=Mobile CPU
MCH_CFG(9) PCIe Graphics Lane	LOW=Reverse Lane HIGH=Normal operation	MCH_CFG(10) HOST PLL VCO SELECT	LOW=RESERVED HIGH=MOBILITY	MCH_CFG(11)	LOW=Calistoga HIGH=Reserved
MCH_CFG(16) (FSB Dynamic ODT)	LOW=Dynamic ODT Disable HIGH=Dynamic ODT Enabled				

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TITLE MW10M Calistoga-1			
SIZE A3	CODE CS	DOC. NUMBER 1310A2120801	REV A02
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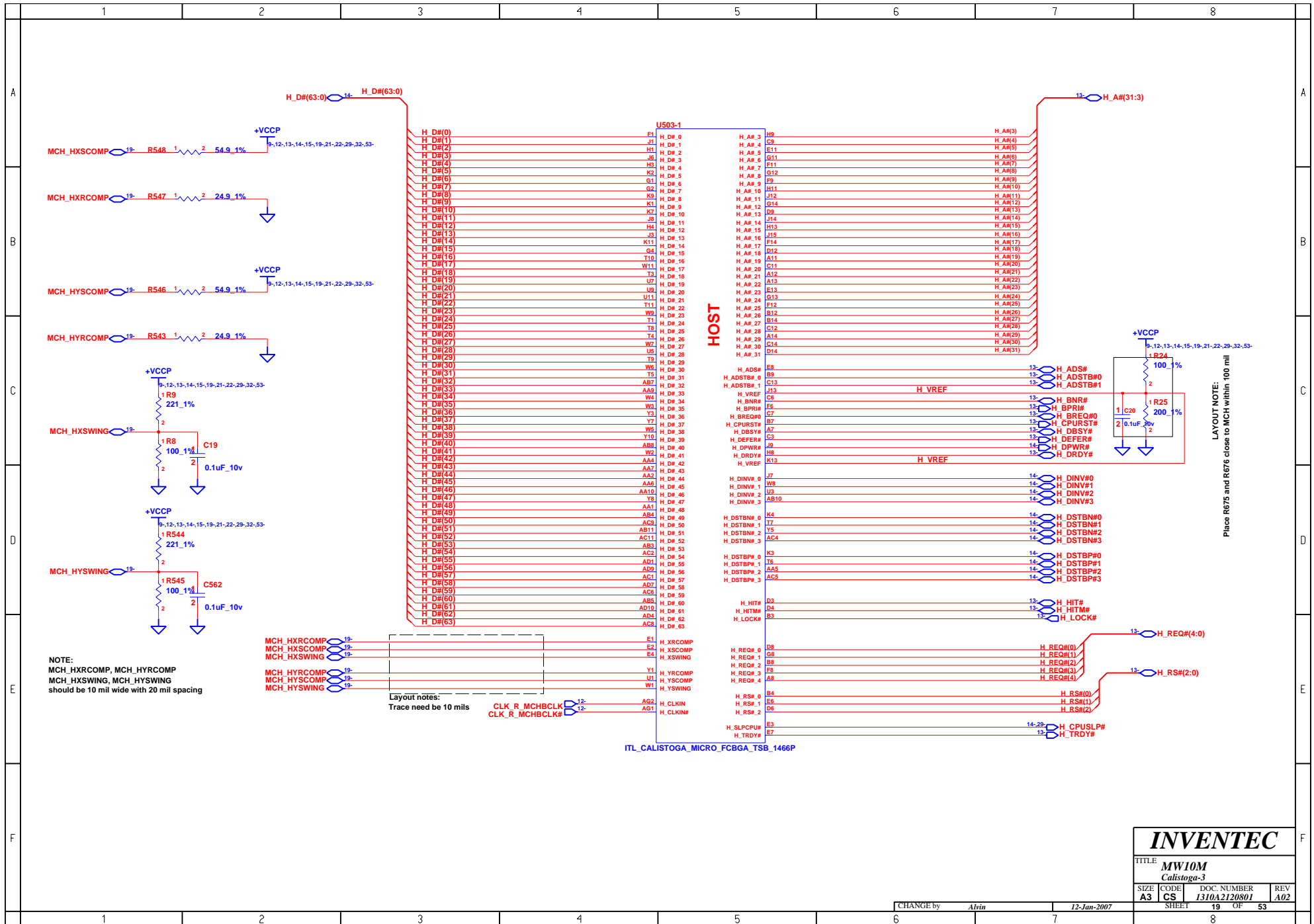
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TITLE
MW10M
Calistoga-2

SIZE	CODE	DOC. NUMBER	REV
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CHANGE by Alvin 12-Jan-2007

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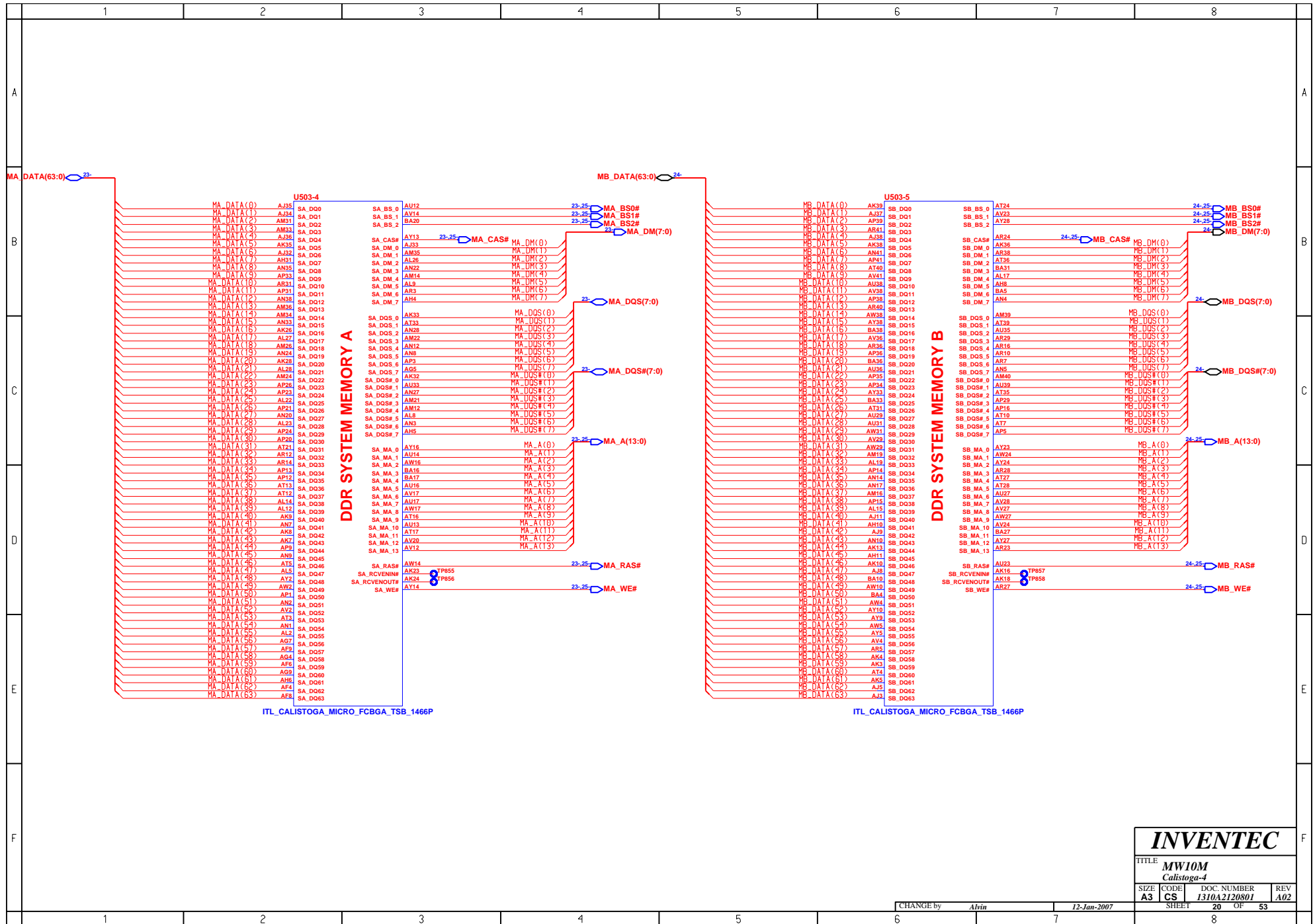
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TITLE
MW10M
Calistoga-3

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CHANGE by *Alvin* 12-Jan-2007

SHEET 19 OF 53



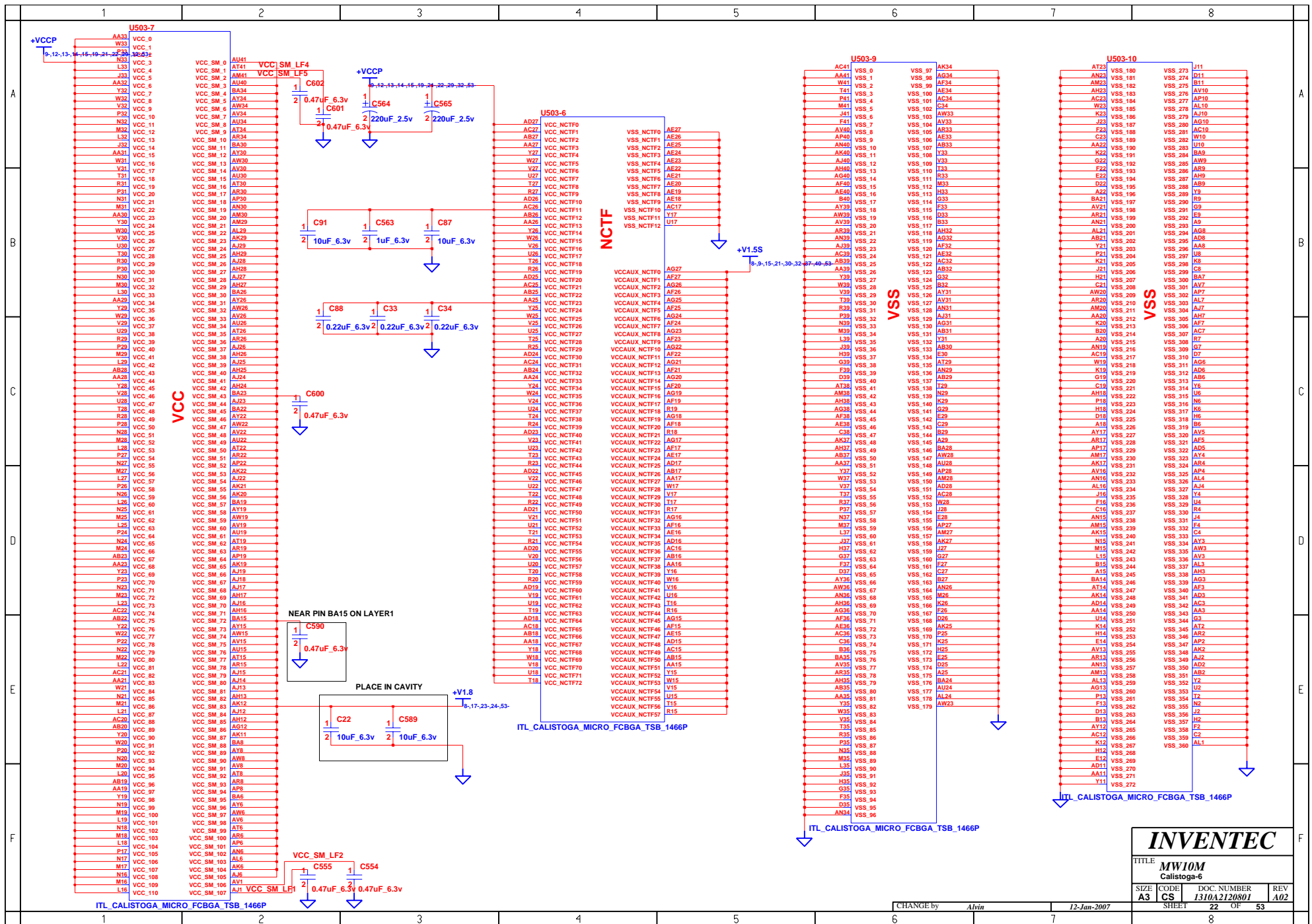
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TITLE
MW10M
Calistoga-4

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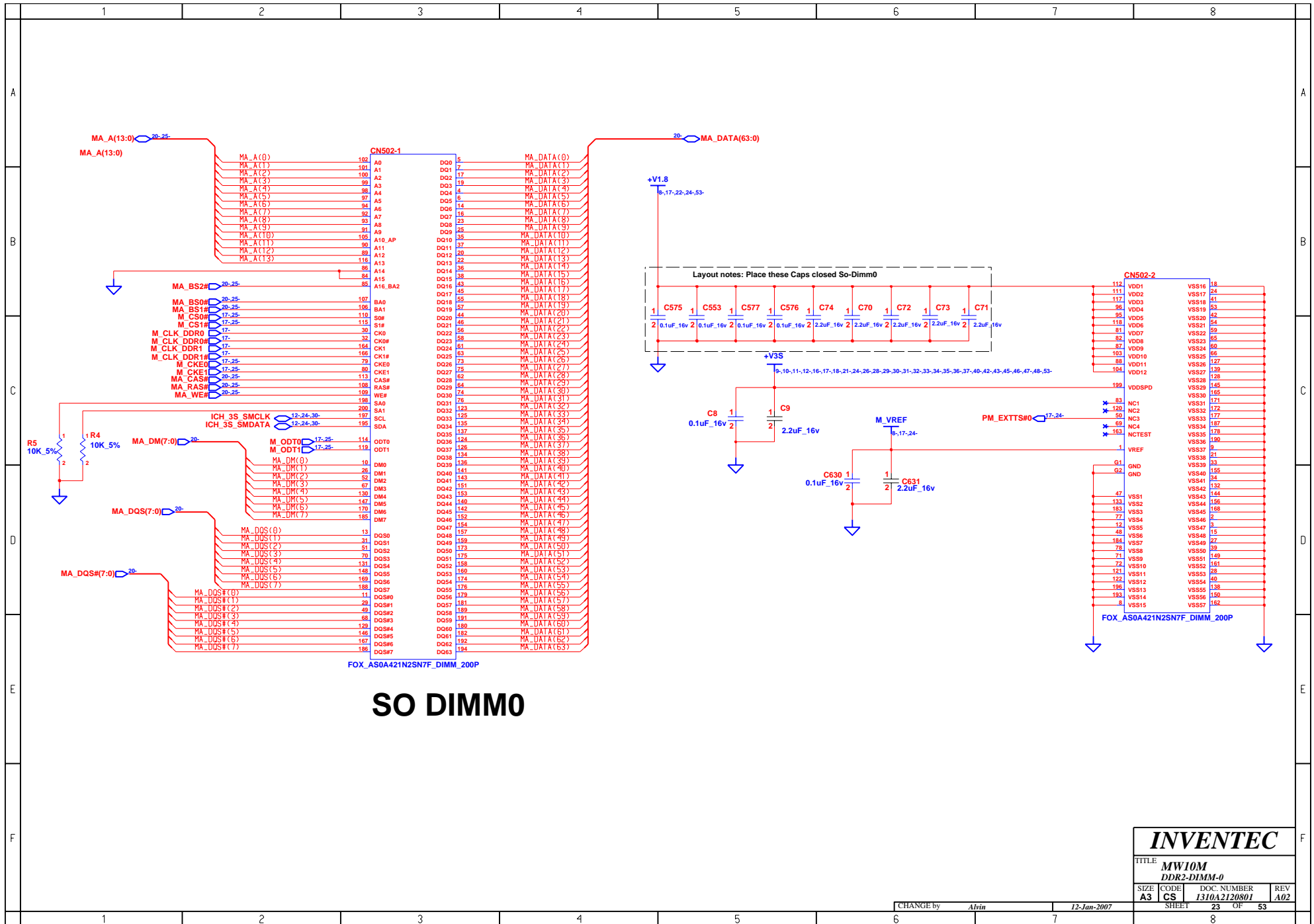
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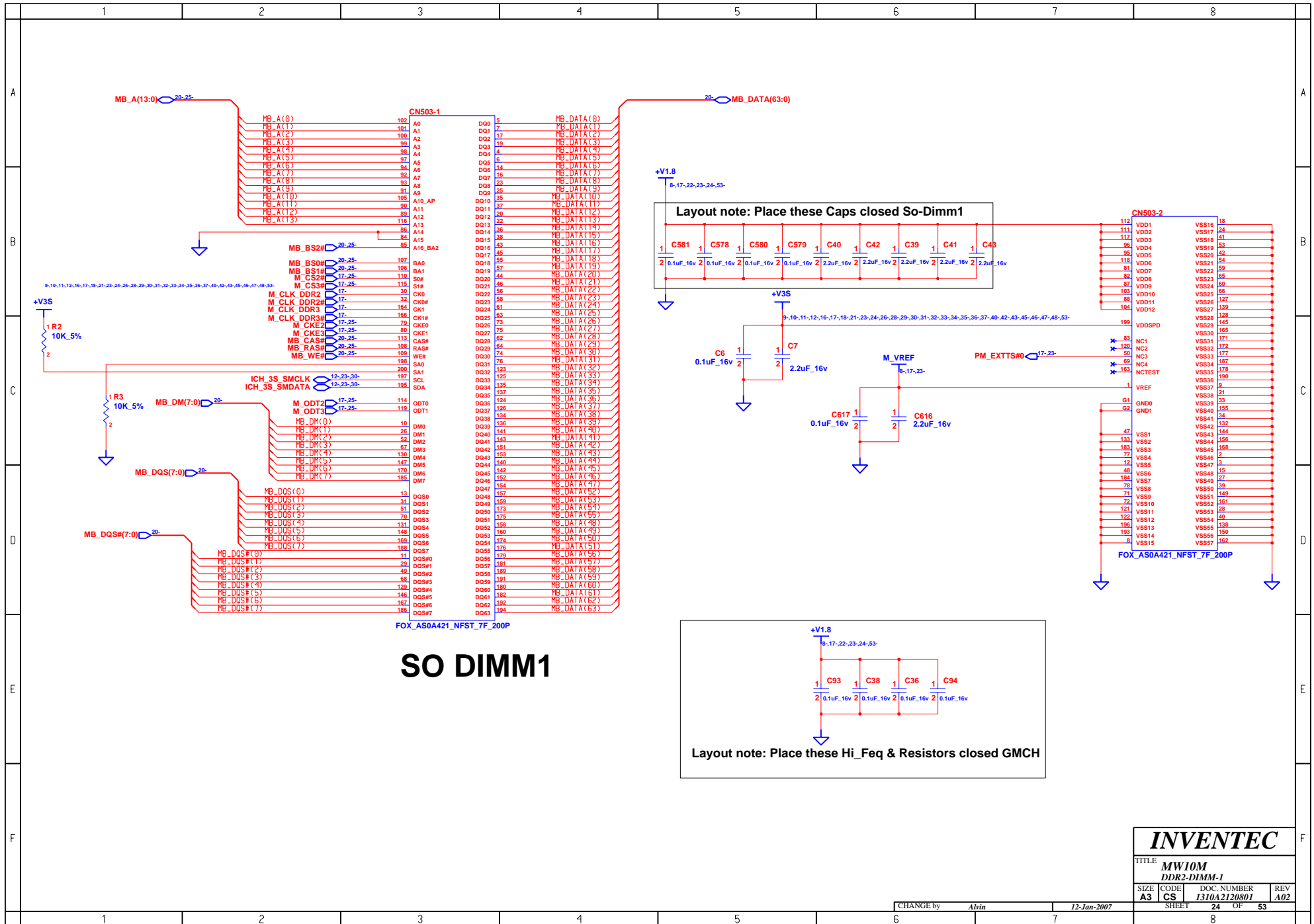


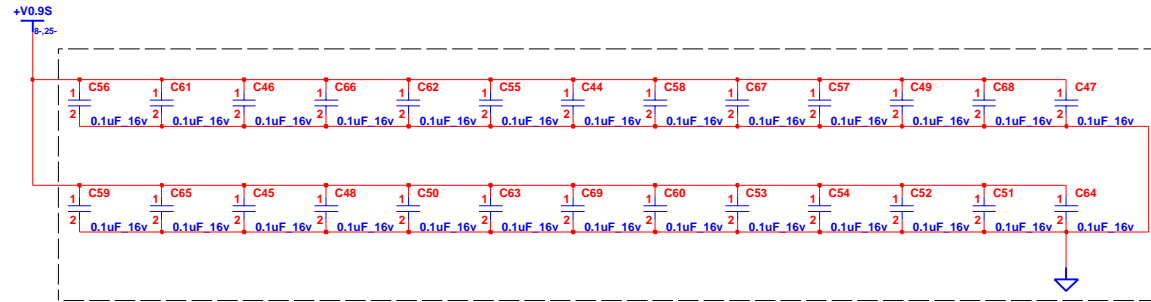
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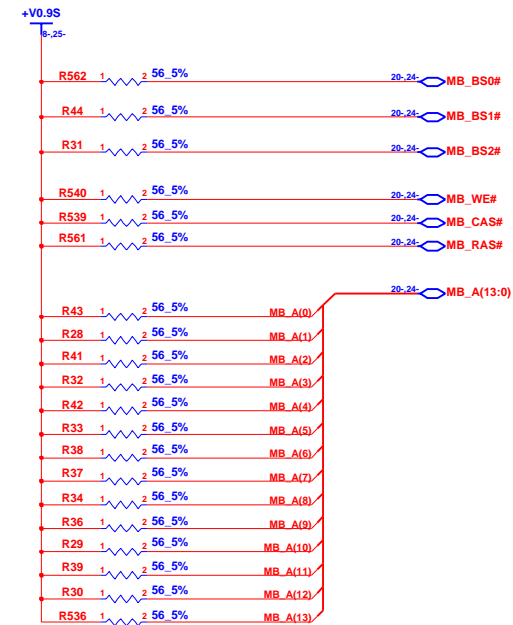
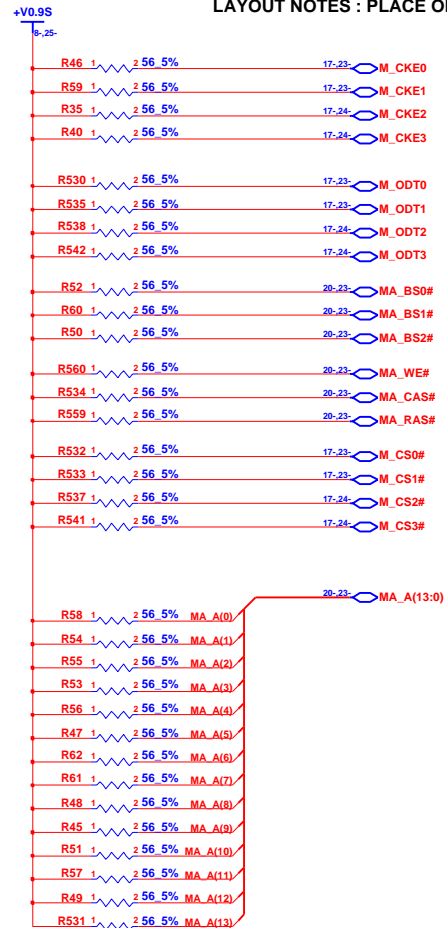
CHANGE by: Alvin 12-Jan-2007







LAYOUT NOTES : PLACE ONE CAP CLOSE TO EVERY 2 PULL UP RESISTOR TERMINATED TO +V0.9S



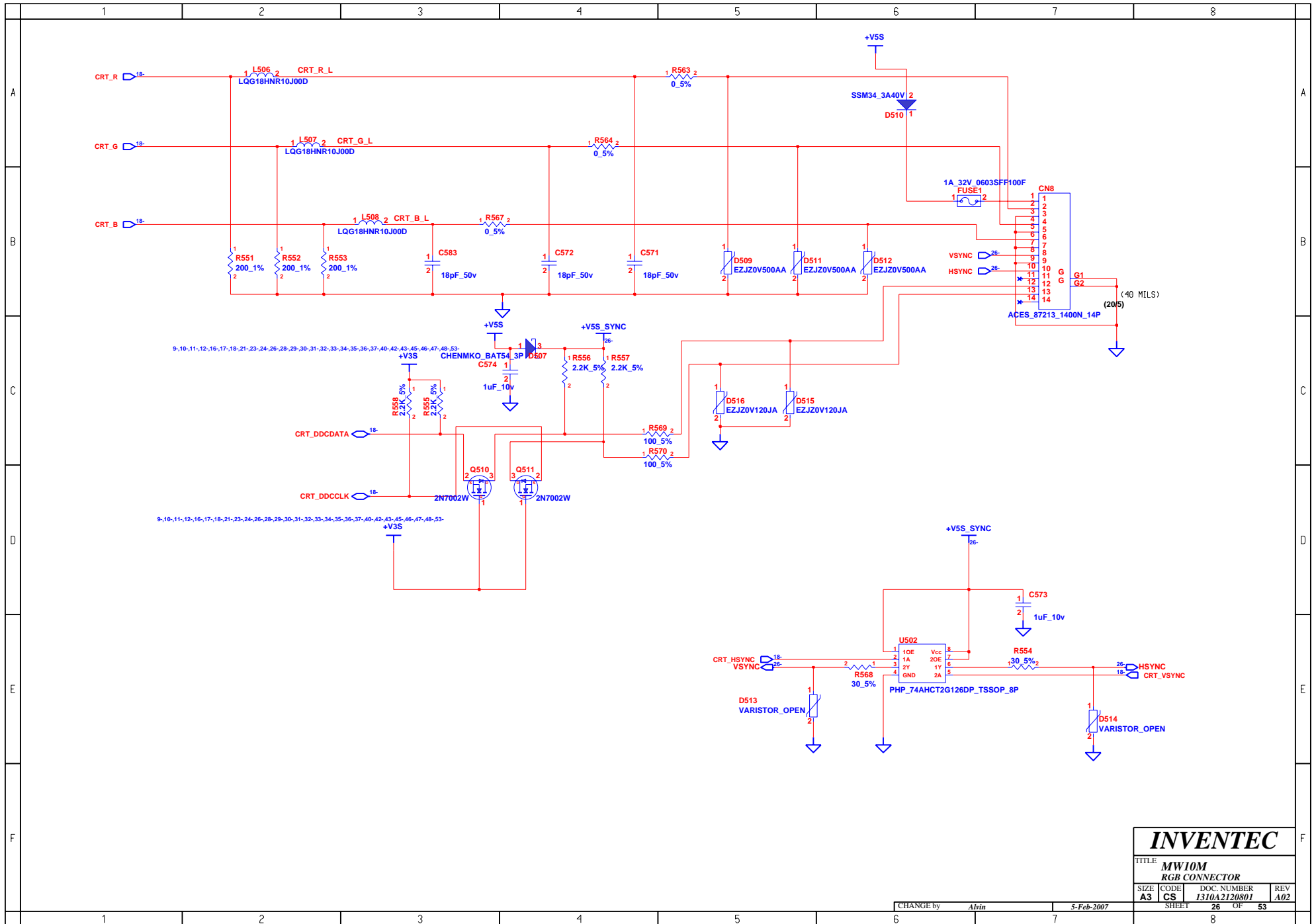
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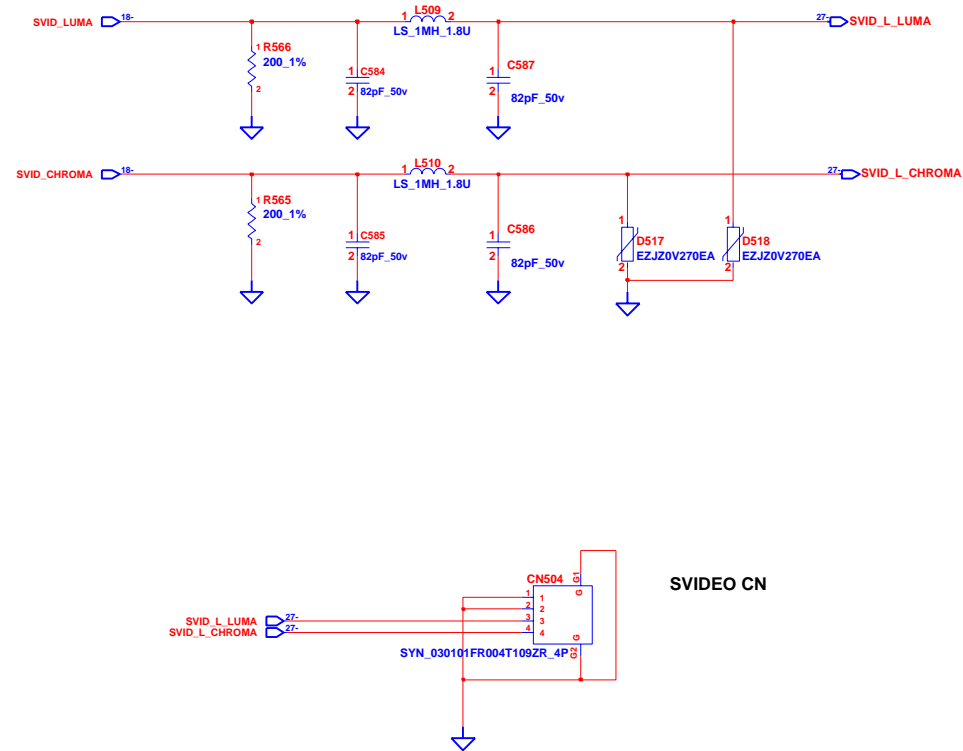
TITLE
MW10M
DDR2-DAMPING

SIZE A3	CODE CS	DOC. NUMBER I310A2120801	REV A02
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CHANGE by *Alvin* 12-Jan-2007

SHEET 25 OF 53





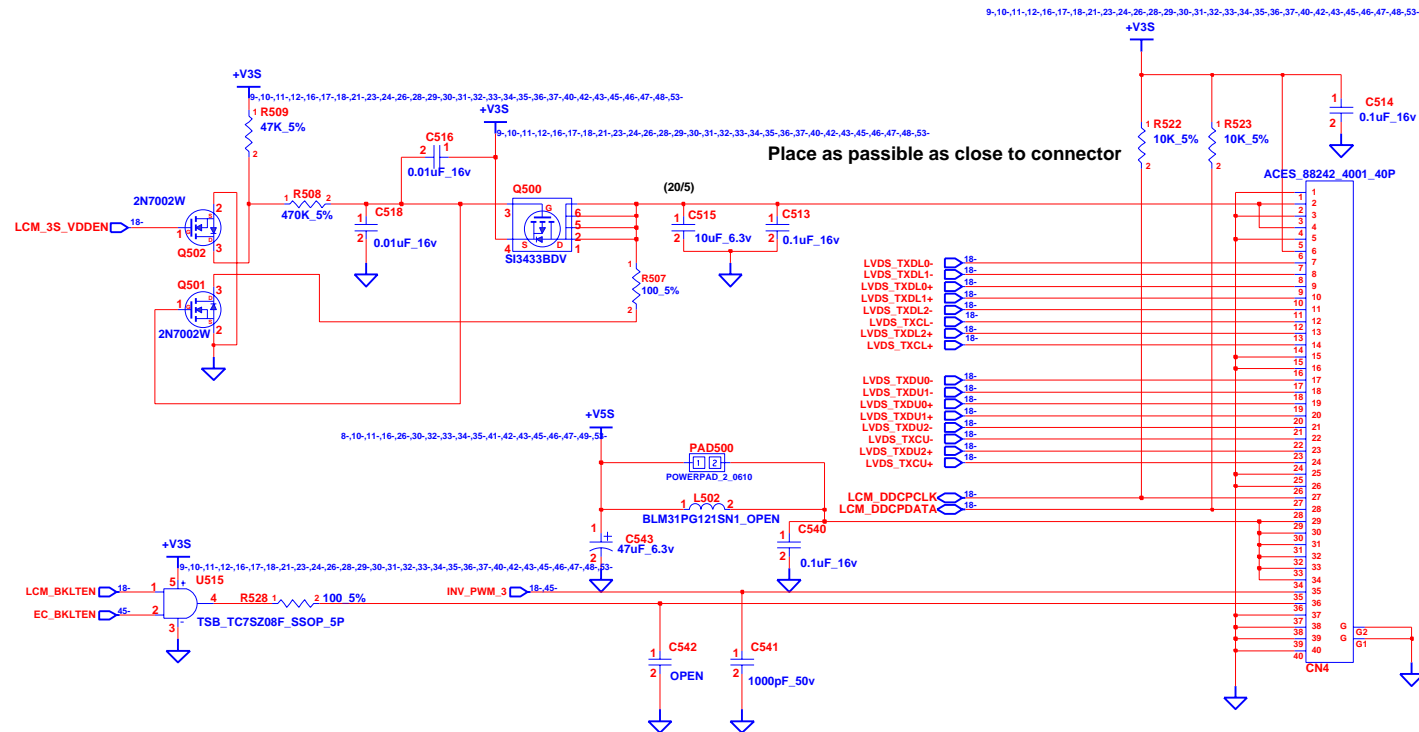
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TITLE
MW10M
S-Video CONN

SIZE A3	CODE CS	DOC. NUMBER 1310A2120801	REV A02
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CHANGE by *Alvin* 12-Jan-2007

SHEET 27 OF 53

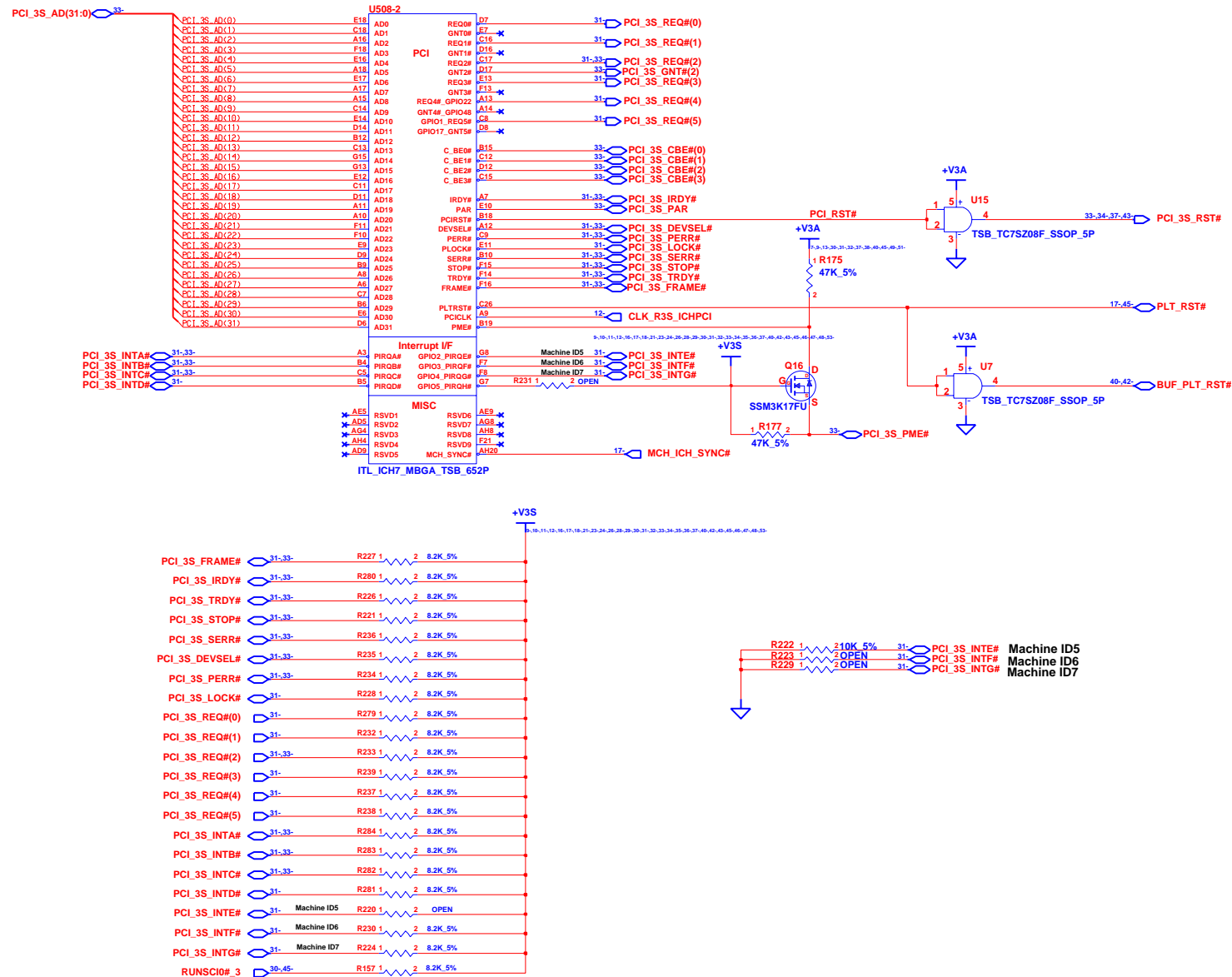


INVENTEC

TITLE			
MW10M			
LCM			
SIZE	CODE	DOC. NUMBER	REV
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CHANGE by Alvin 27-Sep-2003

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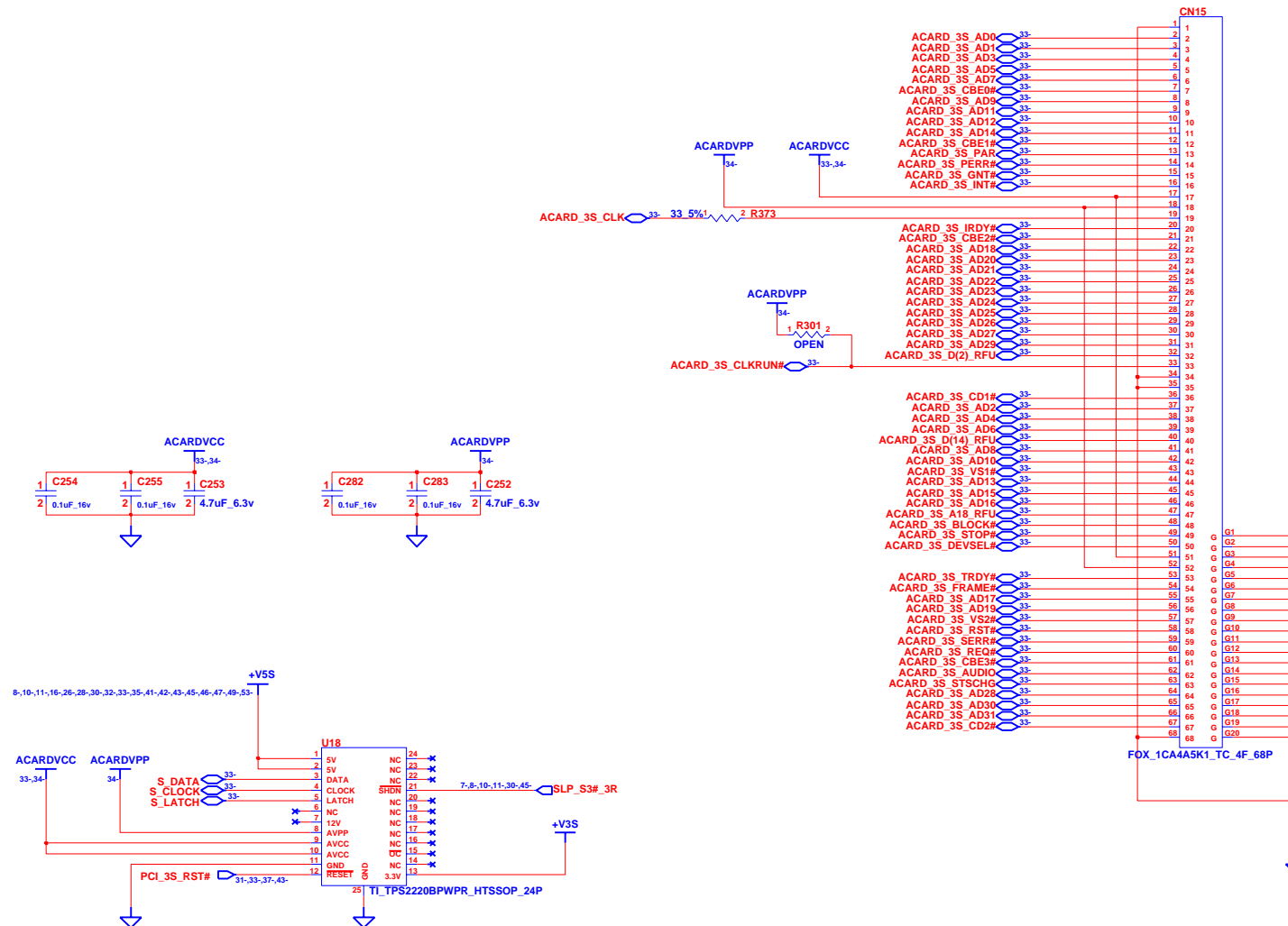


INVENTEC

TITLE MW10M ICH7-3			
SIZE A3	CODE CS	DOC. NUMBER I310A2120801	REV A02
CHANGE by Alvin 10-Feb-2007			
SHEET 31 OF 53			

The schematic diagram illustrates the power management system for the INVENTEC MW10M ICH7-4 motherboard. It details the following components and connections:

- Power Input:** +VSA (5V) and +VSS (Ground).
- Regulators:** CHENMKO_BAT54_3P (3.3V), CHENMKO_BAT54_3P (3.3V), and U508-6 (VCCCP).
- Capacitors:** Various electrolytic capacitors (e.g., C265, C266, C269) and ceramic capacitors (e.g., C220, C221, C222, C223, C224, C225, C226, C227, C228, C229, C230, C231, C232, C233, C234, C235, C236, C237, C238, C239, C240, C241, C242, C243, C244, C245, C246, C247, C248, C249, C250, C251, C252, C253, C254, C255, C256, C257, C258, C259, C260, C261, C262, C263, C264, C265, C266, C267, C268, C269, C270, C271, C272, C273, C274, C275, C276, C277, C278, C279, C280, C281, C282, C283, C284, C285, C286, C287, C288, C289, C290, C291, C292, C293, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C307, C308, C309, C310, C311, C312, C313, C314, C315, C316, C317, C318, C319, C320, C321, C322, C323, C324, C325, C326, C327, C328, C329, C330, C331, C332, C333, C334, C335, C336, C337, C338, C339, C340, C341, C342, C343, C344, C345, C346, C347, C348, C349, C350, C351, C352, C353, C354, C355, C356, C357, C358, C359, C360, C361, C362, C363, C364, C365, C366, C367, C368, C369, C370, C371, C372, C373, C374, C375, C376, C377, C378, C379, C380, C381, C382, C383, C384, C385, C386, C387, C388, C389, C390, C391, C392, C393, C394, C395, C396, C397, C398, C399, C400, C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C415, C416, C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C429, C430, C431, C432, C433, C434, C435, C436, C437, C438, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C457, C458, C459, C460, C461, C462, C463, C464, C465, C466, C467, C468, C469, C470, C471, C472, C473, C474, C475, C476, 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, C9



INVENTEC

TITLE
MW10M
PCMCIA

SIZE CODE DOC. NUMBER REV
A3 CS 1310A2120801 A02

CHANGE by *Alvin* 12-Jan-2007

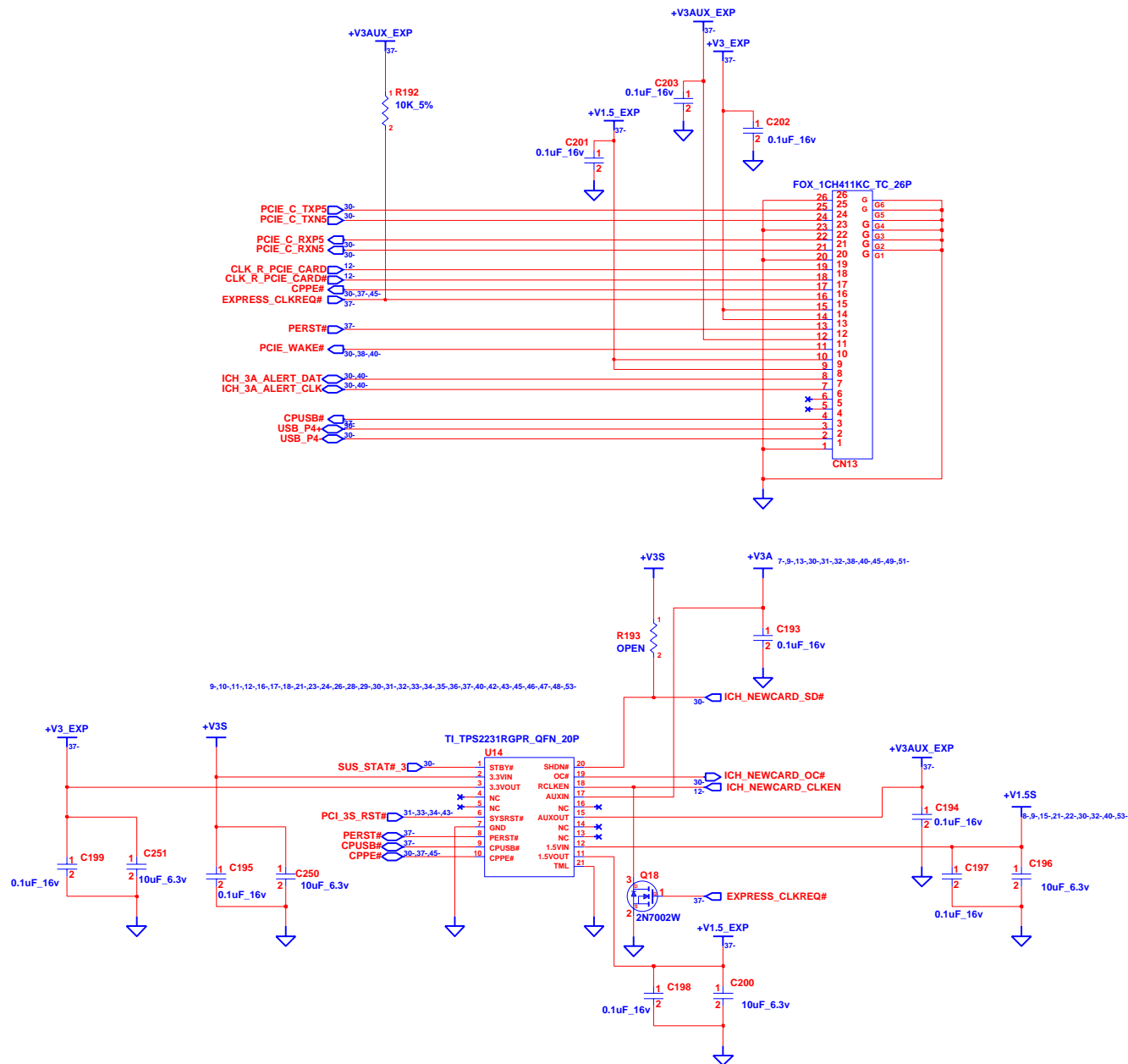
SHEET 34 OF 53

INVENTEC

TITLE: **MW10M
MEMORY CARD CONN**

SIZE A3	CODE CS	DOC. NUMBER 1310A2120801	REV A02
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SHEET 35 OF 53

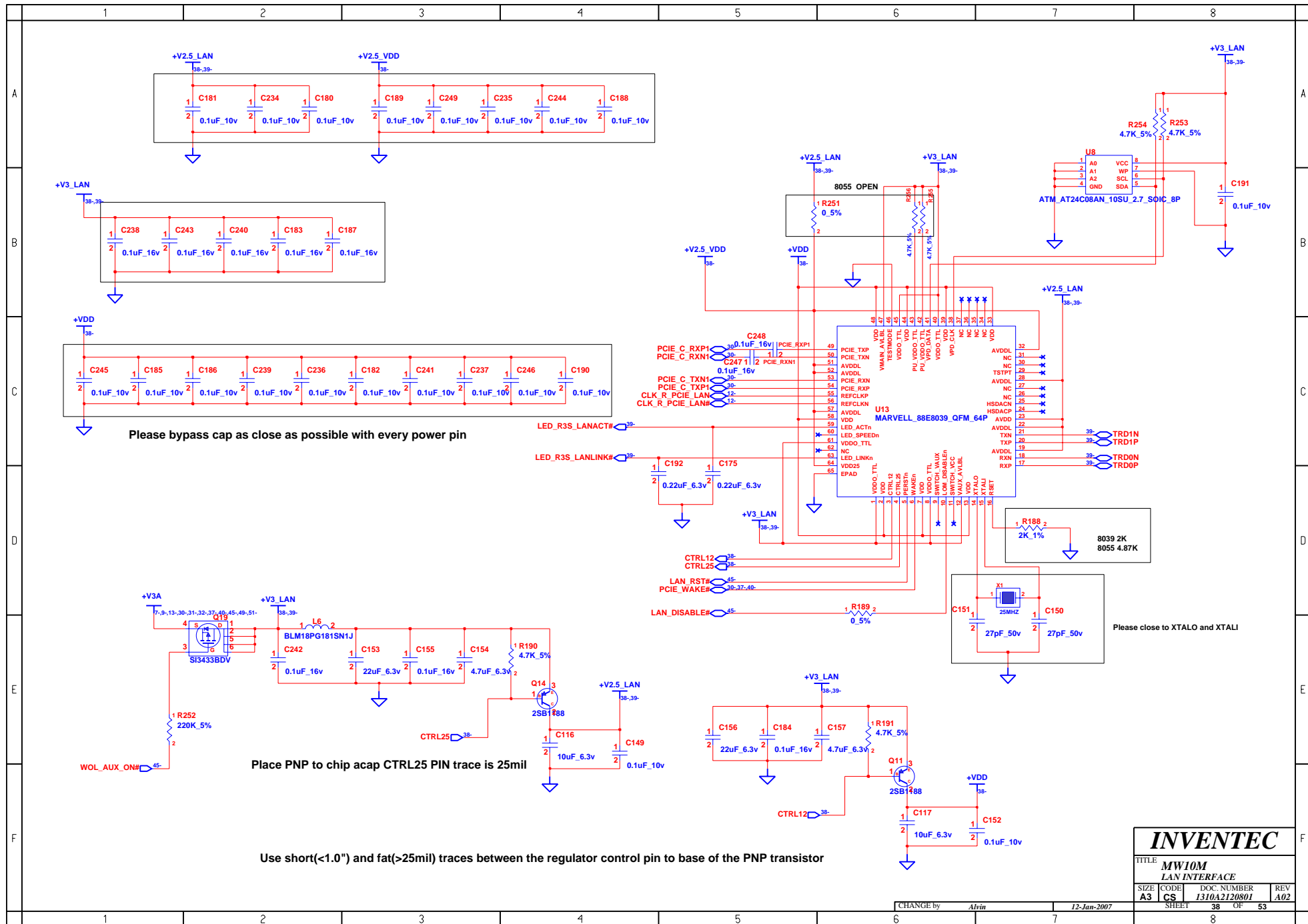


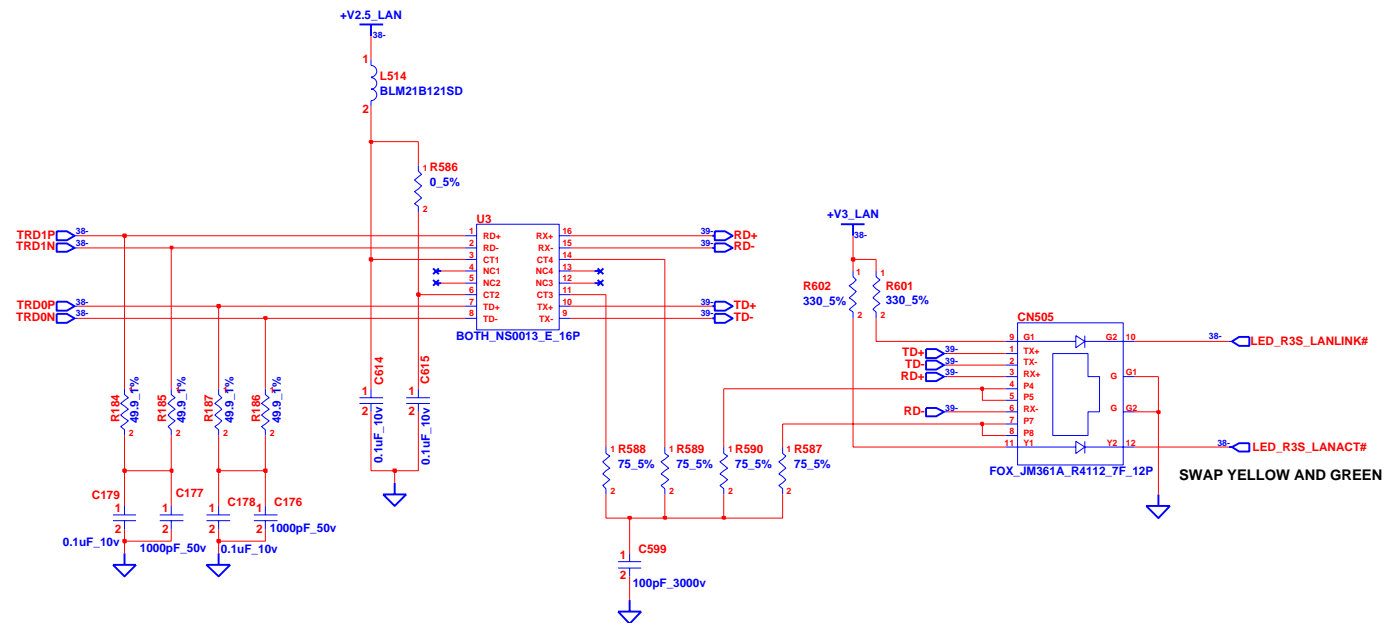
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TITLE			
MW10M Express Card			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2120801	A02

CHANGE by Alvin 12-Jan-2007

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LAYOUT NOTE : Place termination resistors and caps as close to LAN controller as possible

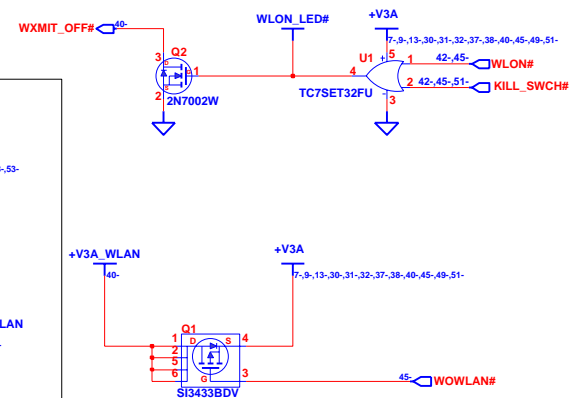
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TITLE
**MW10M
LAN R345 CONN**

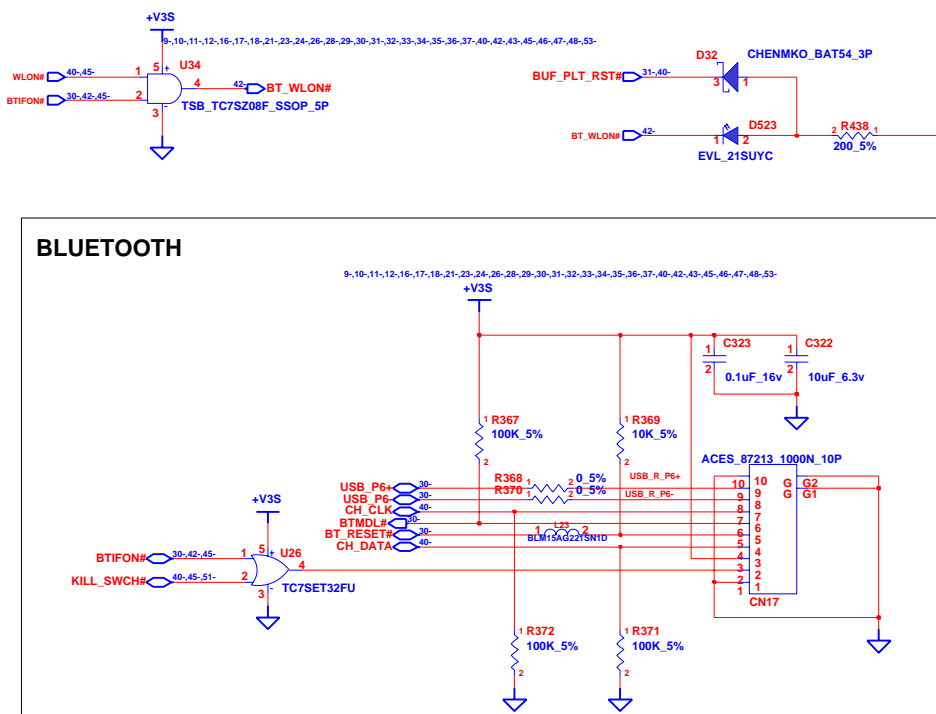
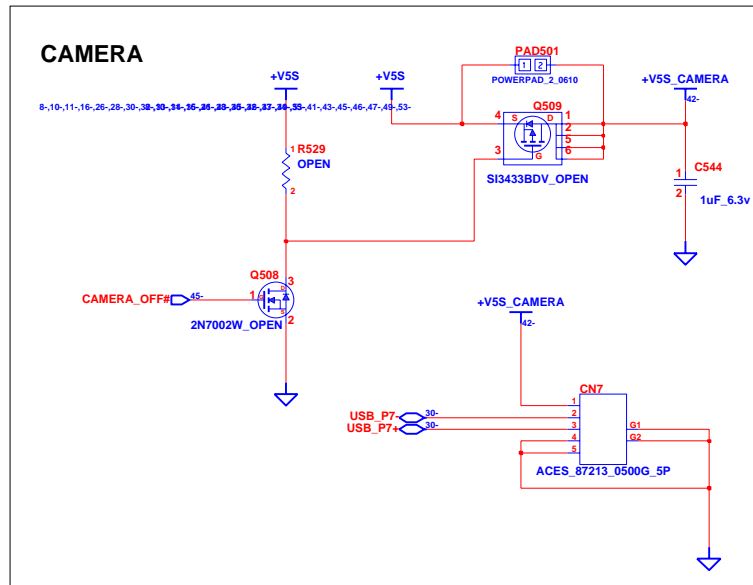
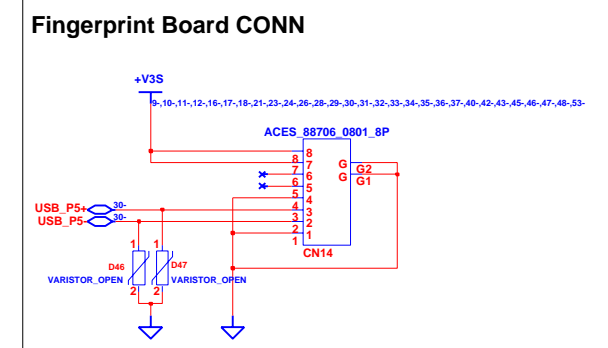
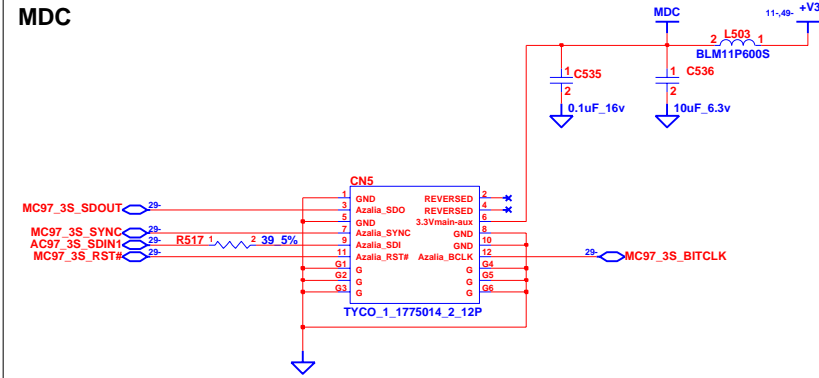
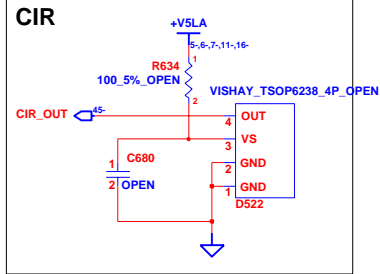
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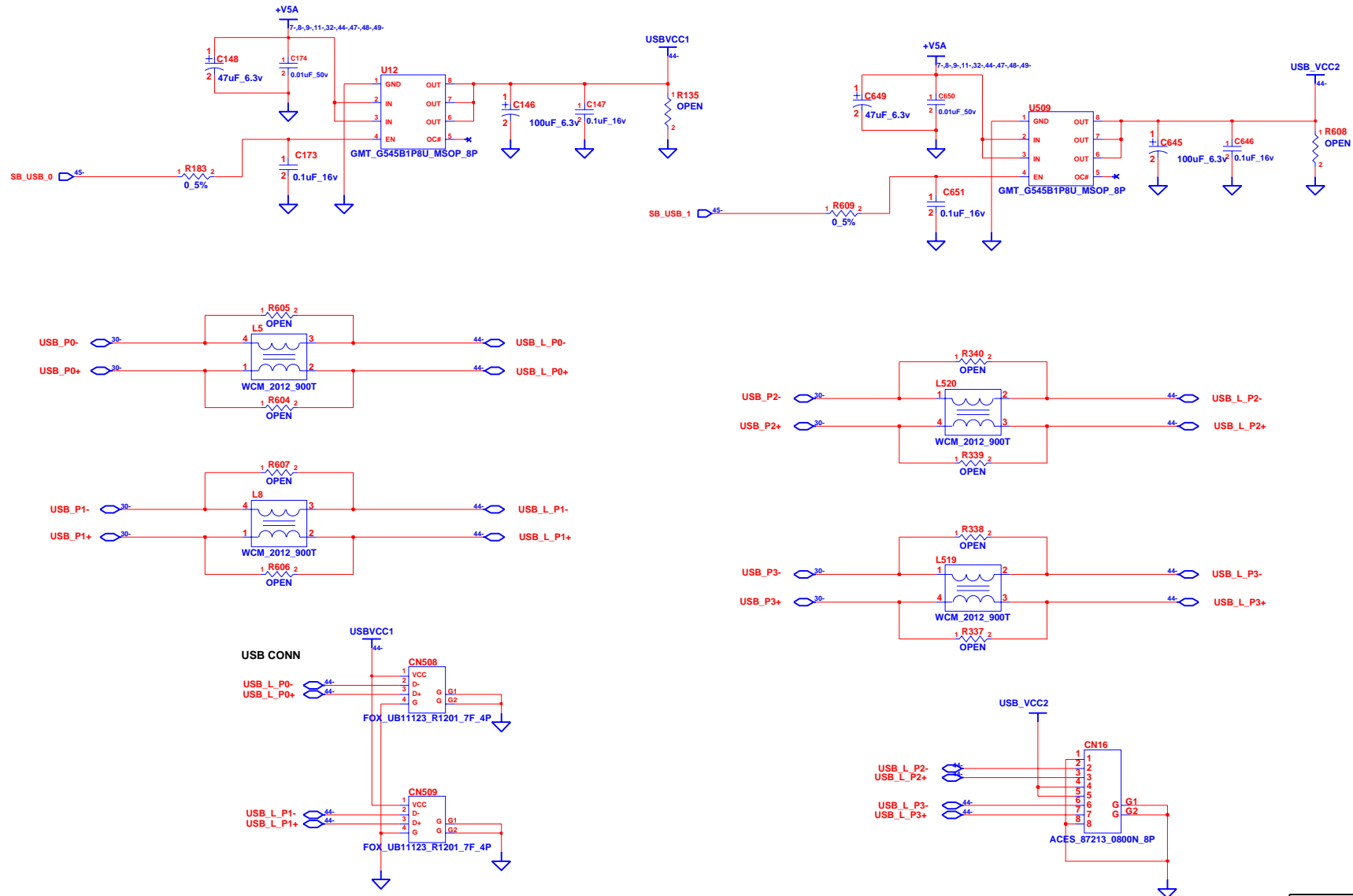
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<i>MW10M</i>			
<i>WLAN</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	<i>1310A2120801</i>	<i>A02</i>
SHEET		40	OF 53



The schematic diagram illustrates the electrical connections for a PCI Express to SATA bridge. The PCI Express side (left) includes signals for data (PIDE_3S_D(15:0)), reset (PCI_3S_RST#), request (PIDE_3S_DREQ), I/O (PIDE_3S_IOR#, PIDE_3S_IOW#), interrupt (PIDE_3S_IRQ), and address (PIDE_3S_A(2:0)). The bridge chip, SYN_800031MR050S133ZL_50P, is the central component. It is connected to a SATA interface (right) via signals G1, G2, G3, and G4. Power and ground connections are shown, including +V3S, +V5S, and various capacitors (C721, C722, C723, C724, C113, C114, C115, R87, R86, R98, R99). A connector CN506 is also shown.

CHANGE	by	date
1	Abin	12-Jun-2007

TITLE		DOC. NUMBER		REV
MW10M		1310A2120801		A02
SIZE	CODE	SHEET	OF	
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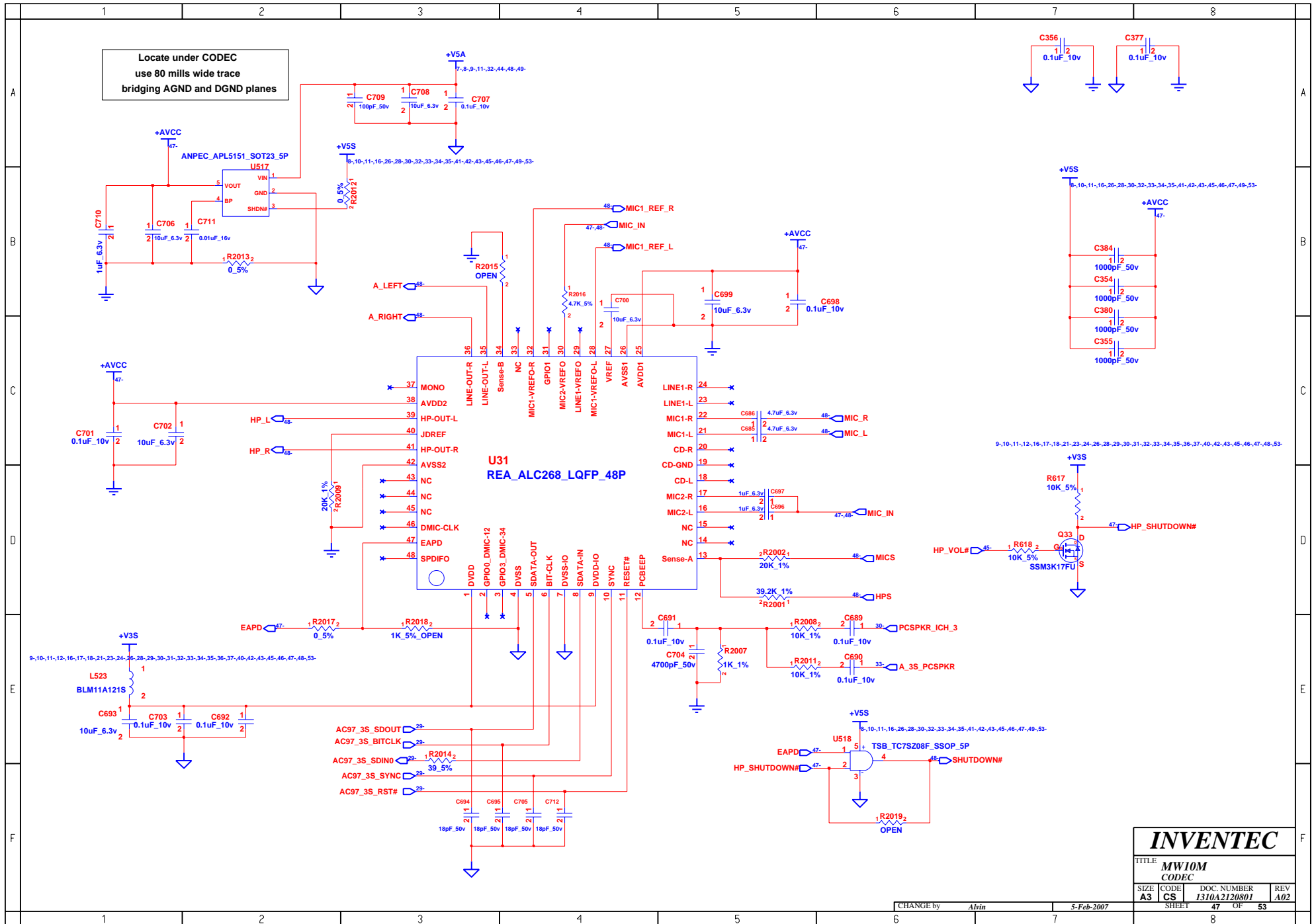
INVENTEC

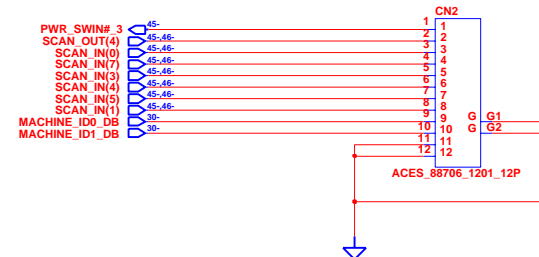
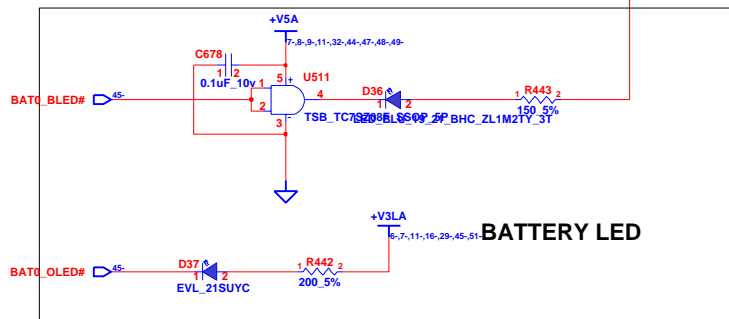
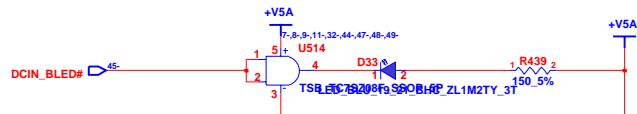
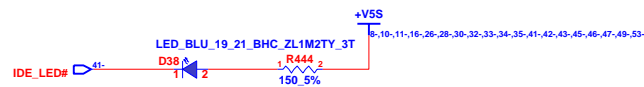
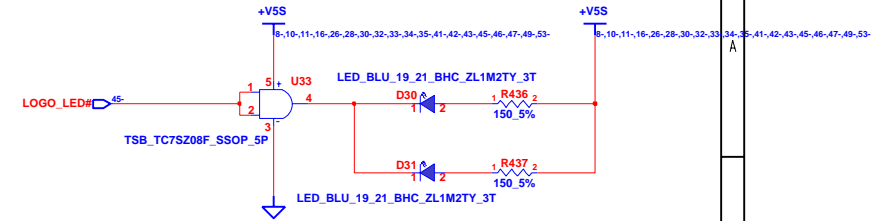
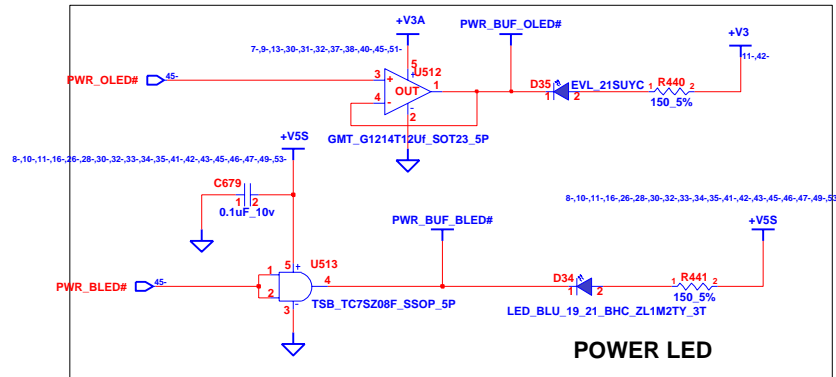
TITLE
MW10M
USB CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1310A2120801	A02

CHANGE by Alvin 12-Jan-2007

SHEET 44 OF 53



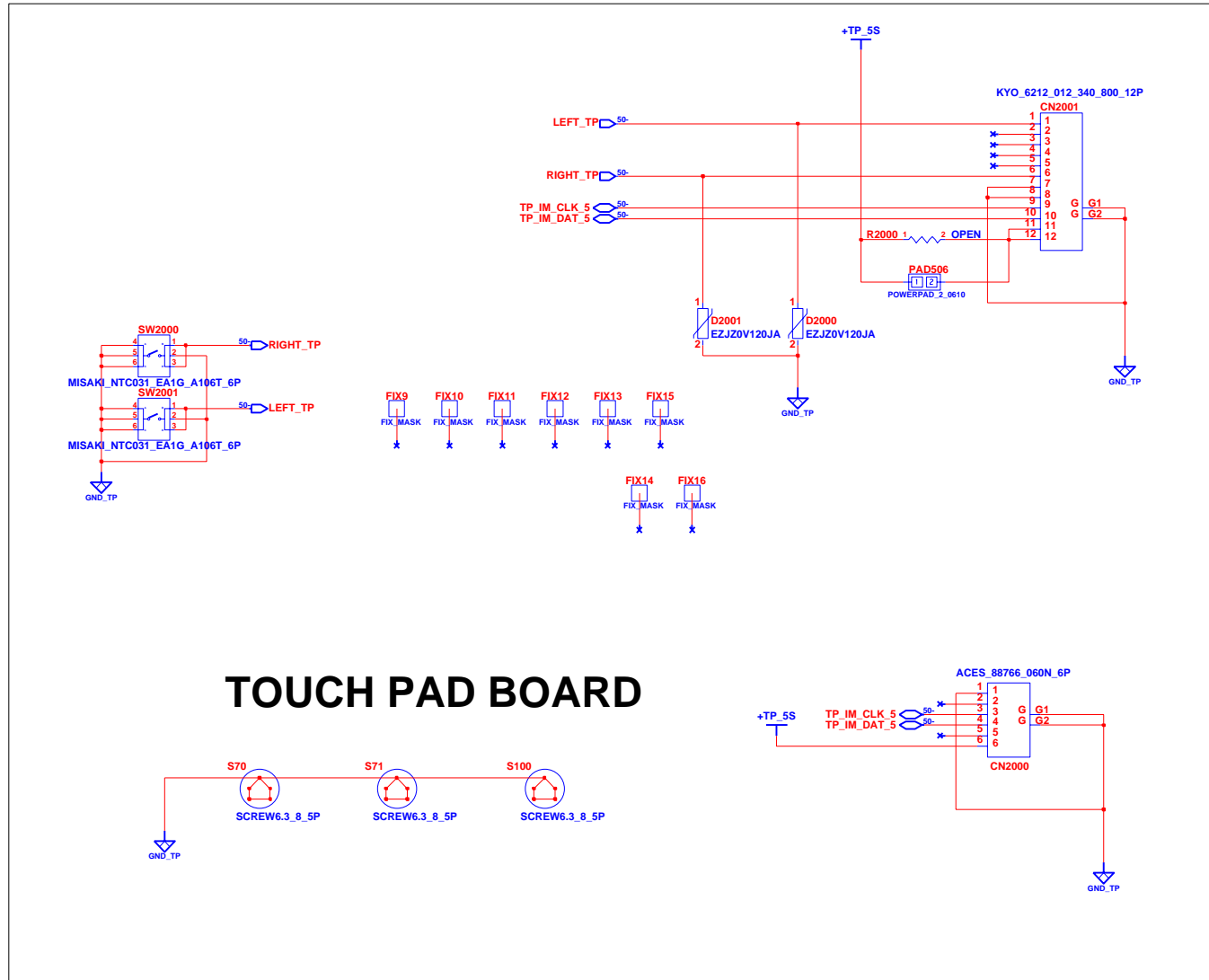


INVENTEC
TITLE
MW10M
LED

SIZE CODE DOC. NUMBER REV
A3 CS I310A2120801 A02

CHANGE by Alvin 12-Jan-2007

SHEET 49 OF 53

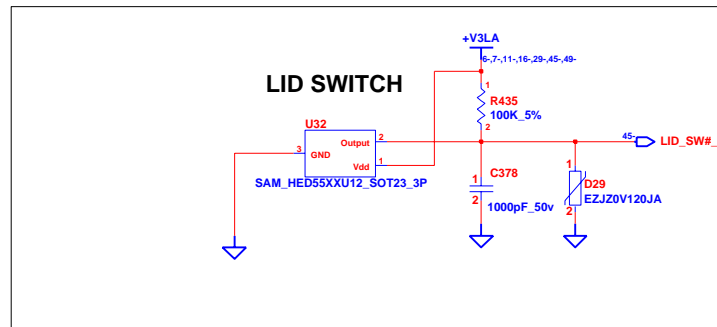
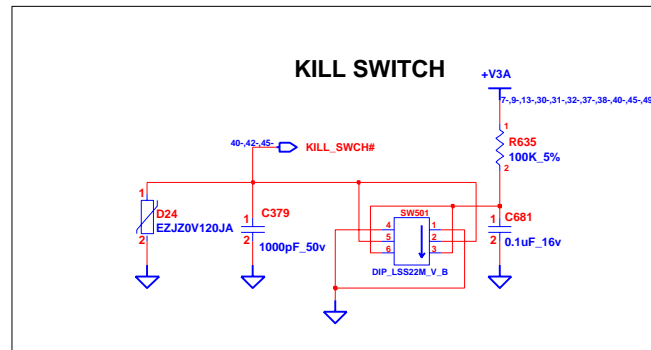


INVENTEC

TITLE MW10M Touch Pad Board			
SIZE A3	CODE CS	DOC. NUMBER I310A2120801	REV A02

CHANGE by *Alvin* 12-Jan-2007

SHEET 50 OF 53



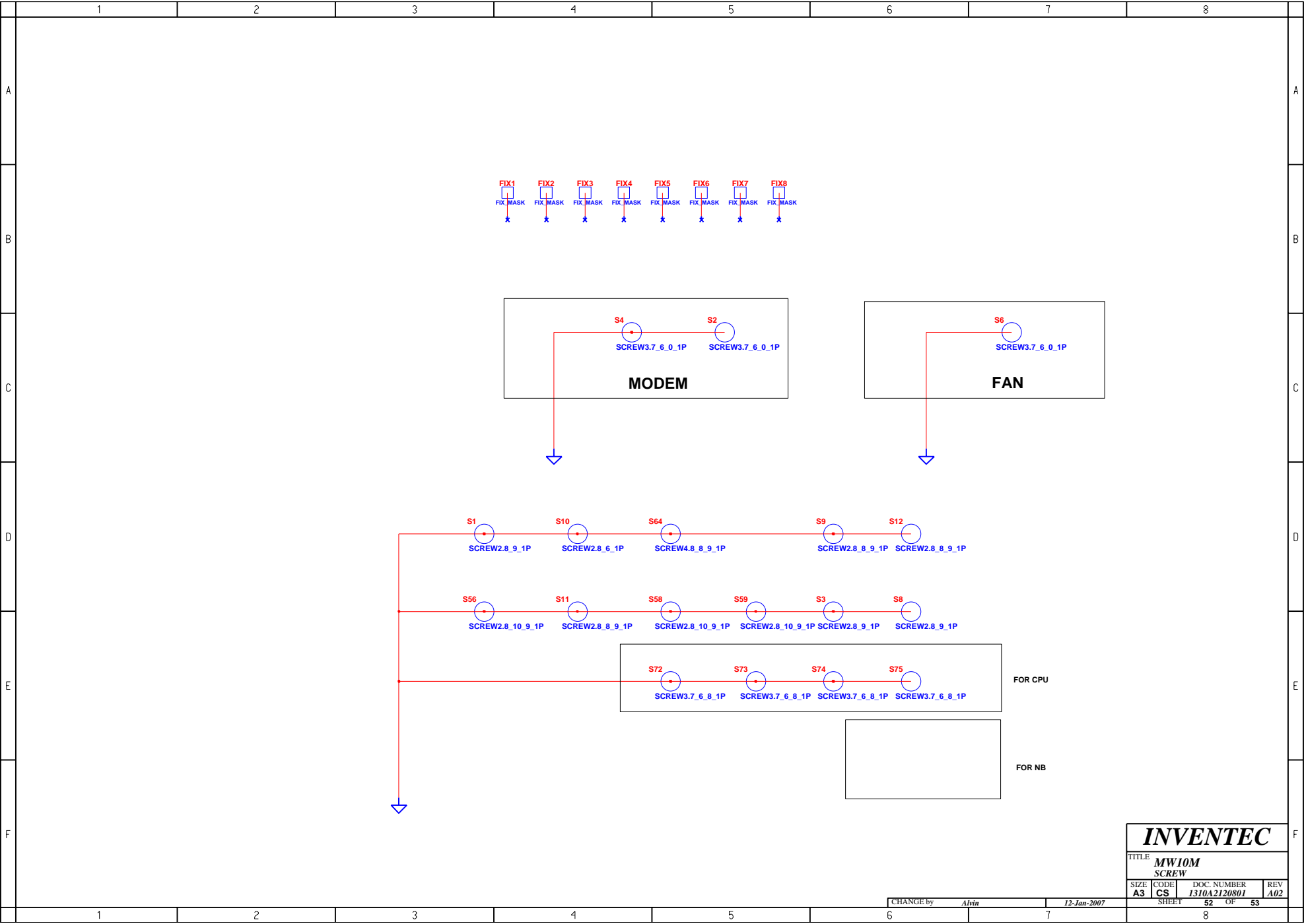
INVENTEC

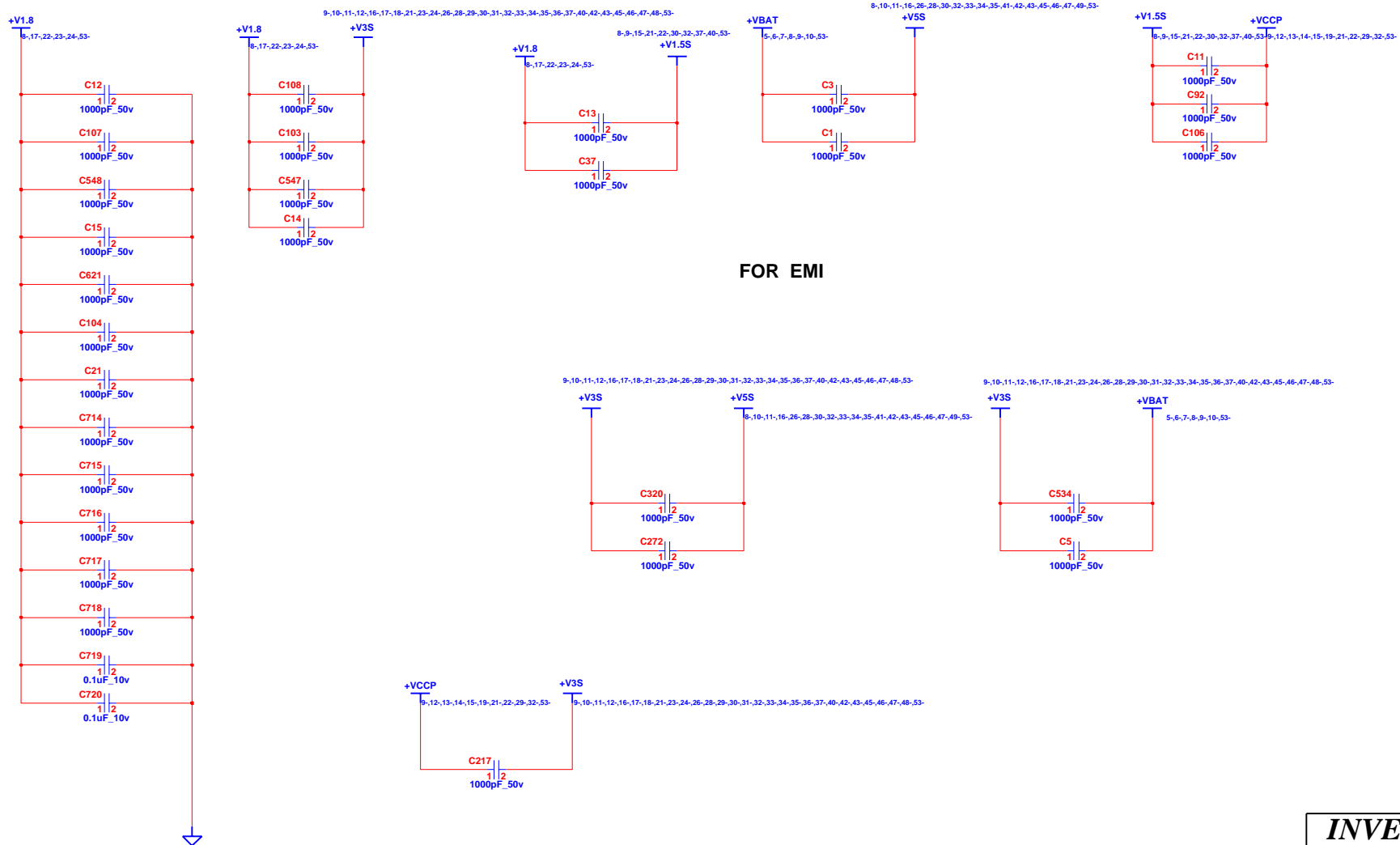
TITLE
MW10M
Kill SW & Lid SW

SIZE A3	CODE CS	DOC. NUMBER I310A2120801	REV A02
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CHANGE by *Alvin* 12-Jan-2007

SHEET 51 OF 53





INVENTEC

TITLE			
MW10M			
EMI			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I310A2120801	A02
SHEET		53	OF 53

CHANGE by Alvin 12-Jan-2007