

	1	2	3	4	5	6	7	8	
A									A
B									B
C									C
D									D
E									E
F									F

DATE	CHANGE NO.	REV

DRAWER	EE	DATE	POWER	DATE
DESIGN				
CHECK				
RESPONSIBLE				
SIZE = 3		VER :		
FILE NAME : XXXX-XXXXXX-XX				
P/N	XXXXXXXXXXXX			

INVENTEC	
TITLE Knockhill 10A	
SIZE A3	CODE CS
DOC. NUMBER	REV X01
SHEET 1 OF 50	

TABLE OF CONTENTS

PAGE	PAGE
1.COVER PAGE	32.RTC
2.INDEX	33.CARDBUS CONTROLLER
3.BLOCK DIAGRAM	34.PC CARD SLOT
4.POWER SEQUENCE BLOCK	35.1394 CONTROLLER
5-12.SYSTEM POWER	36.MINIPCI CONN
13.CLOCK GENERATOR	37.LAN CONTROLLER
14.CPU(1/4)	38.RJ45 & TRANSFORMER
15.CPU(2/4)	39.HDD CONN
16.CPU(3/4)	40.ODD CONN
17.CPU(4/4)	41.USB CONN
18.FAN & THERMAL CONTROLLER	42.SUPER I/O
19.N/B(1/5)	43.K/B & D/B CONN
20.N/B(2/5)	44.AC97 CODEC
21.N/B(3/5)	45.AUDIO AMP
22.N/B(4/5)	46.MDC
23.N/B(5/5)	47.SWITCH & LED (MB)
24.DDR2 DIMM0	48.SWITCH & LED (DB)
25.DDR2 DIMM1	49.USB & SVIDEO BOARD
26.DDR2 PULL UP TERMINATOR	50.TP BOARD
27.CRT	
28.LCD CONN	
29.S/B(1/5)	
30.S/B(2/5)	
31.S/B(3/5)	

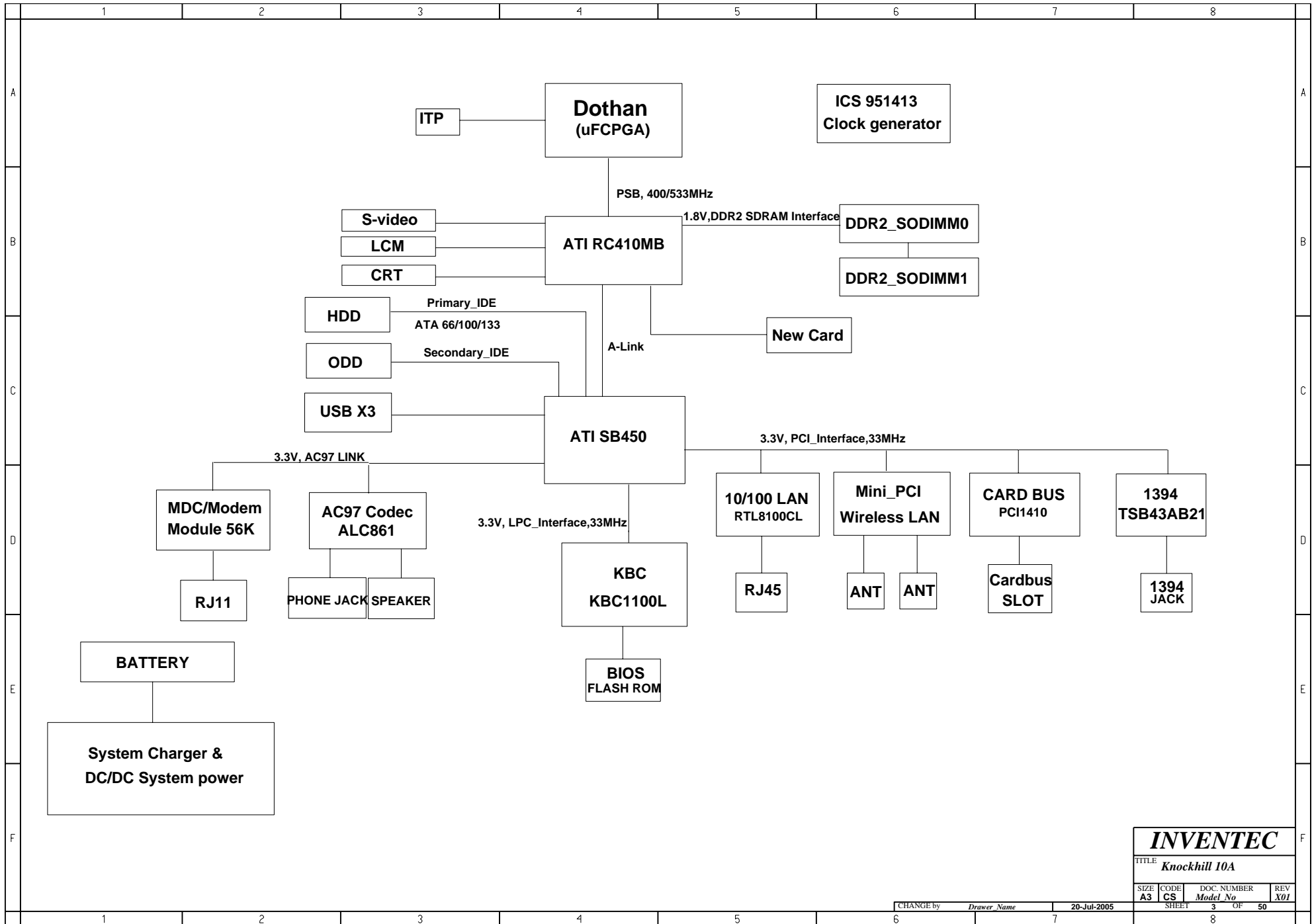
INVENTEC

TITLE **Knockhill 10A**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
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CHANGE by *Drawer Name* 20-Jul-2005

SHEET 2 OF 50



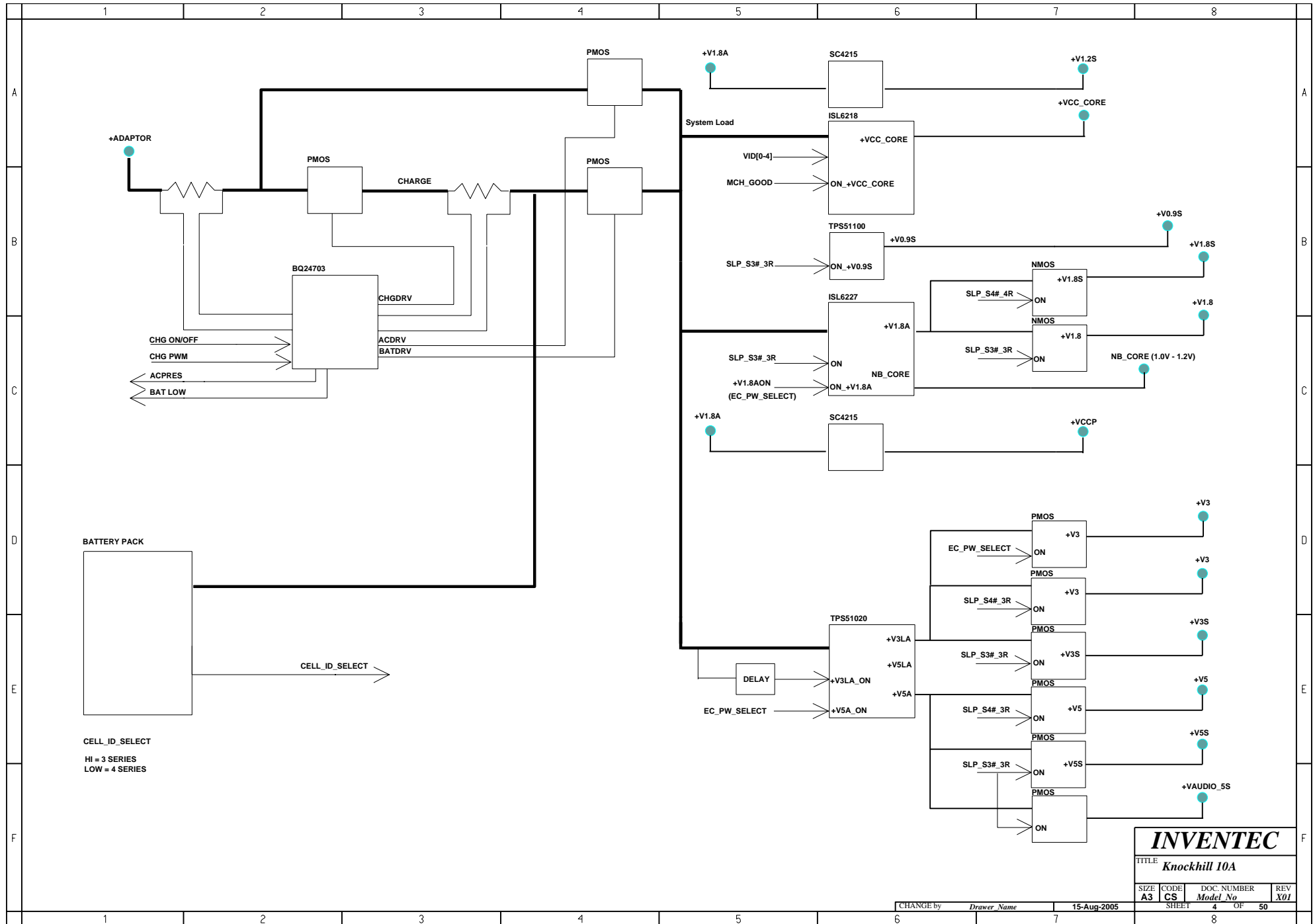
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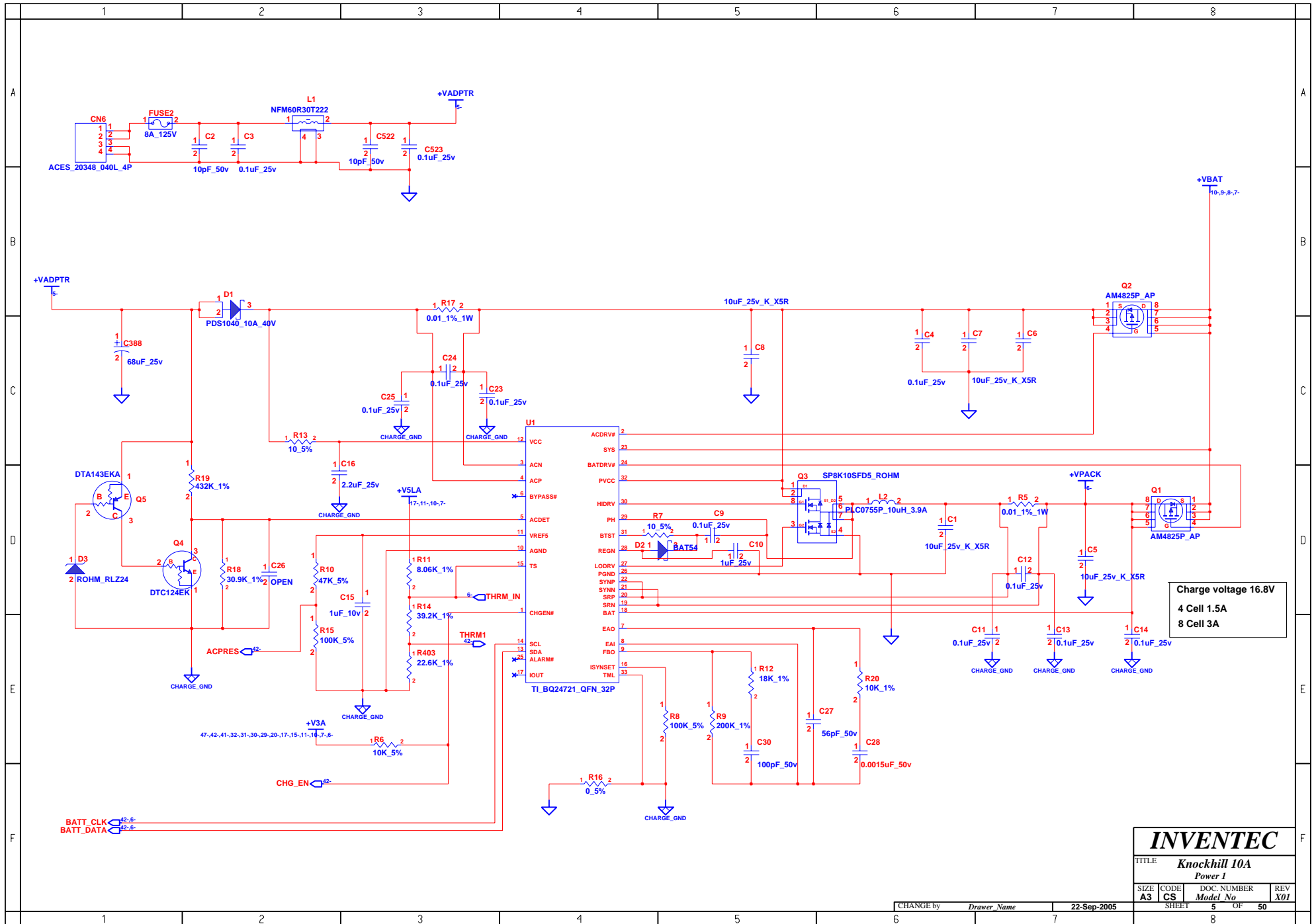
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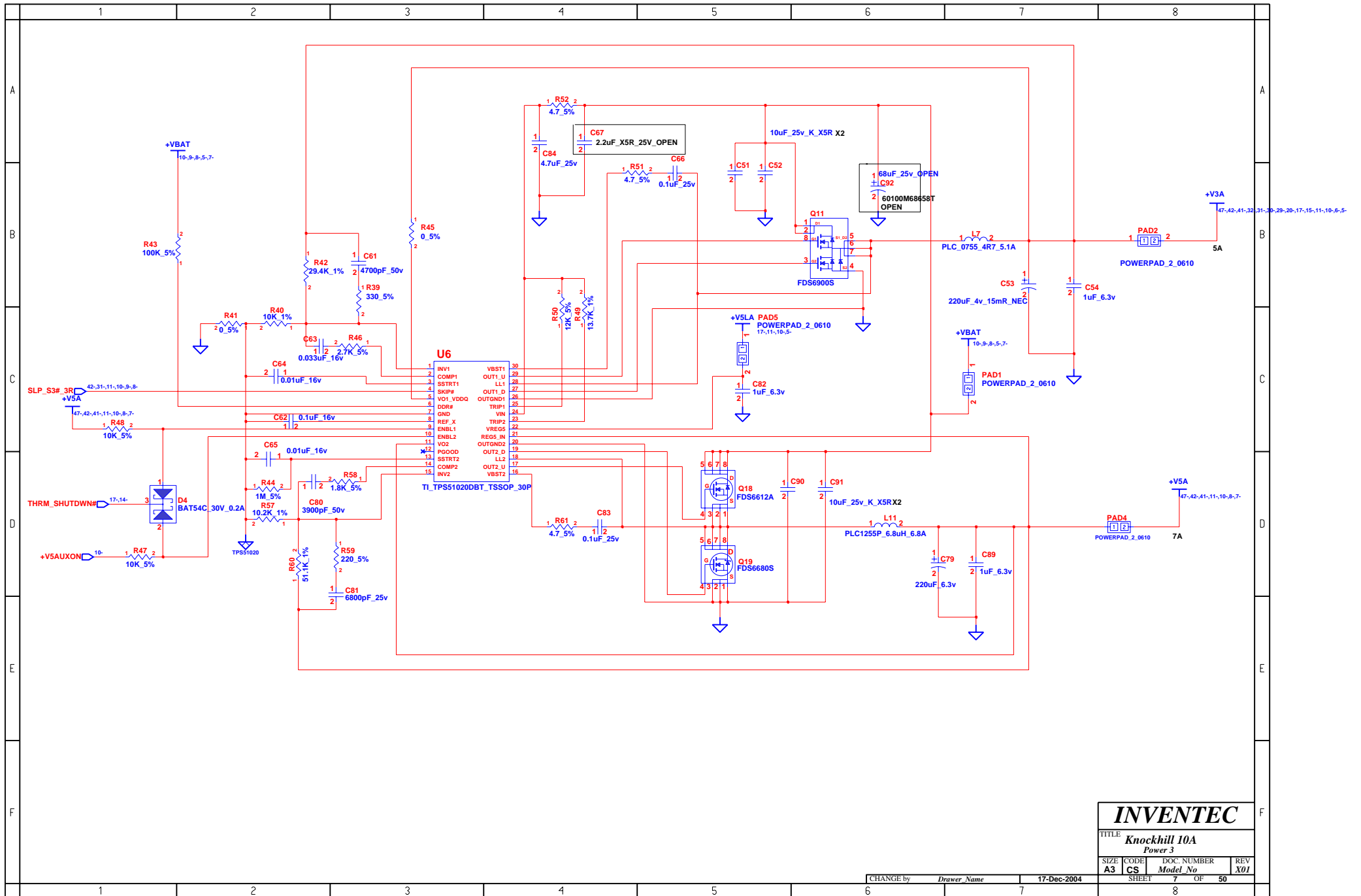
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
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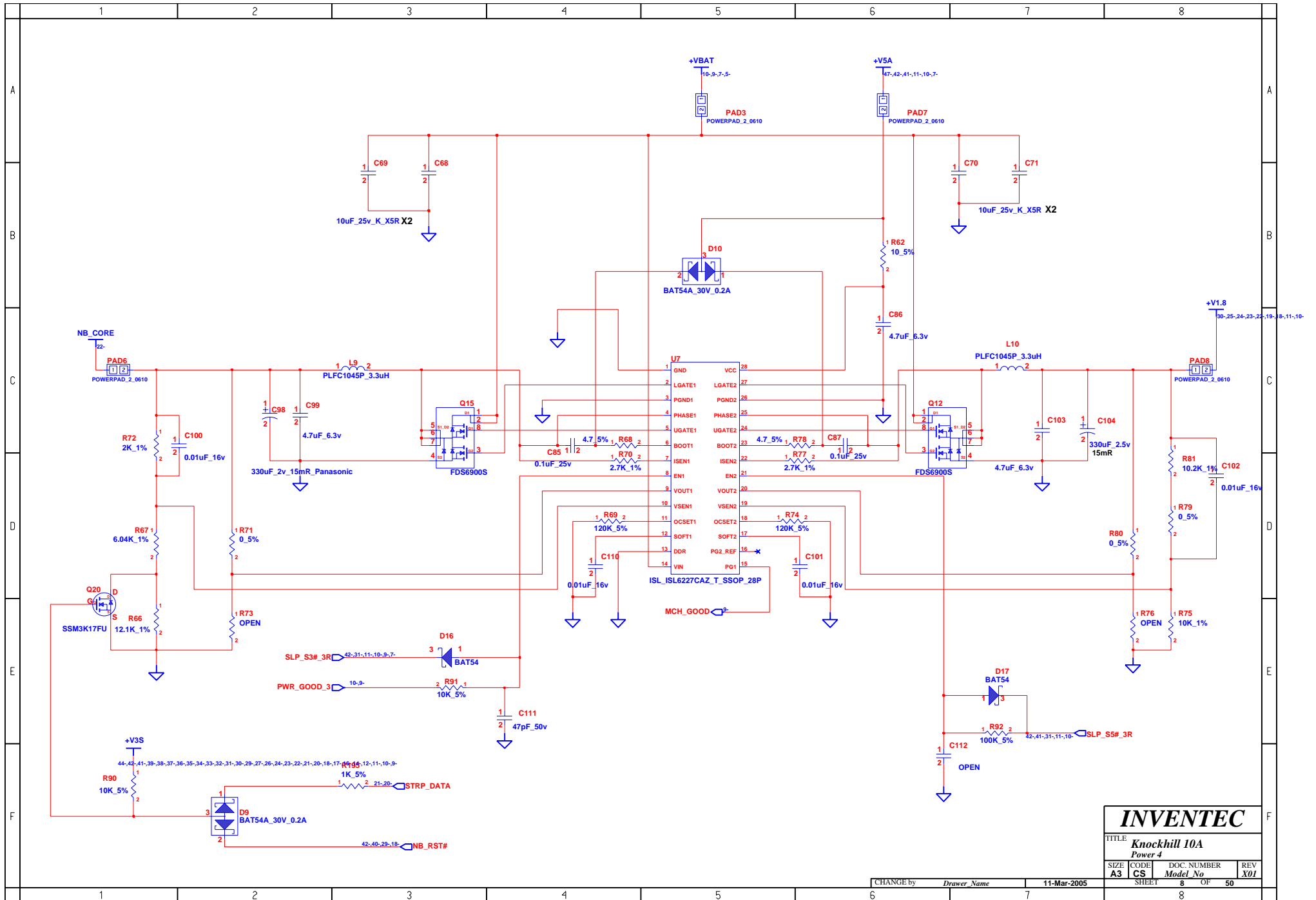
CHANGE by *Drawer Name* 20-Jul-2005

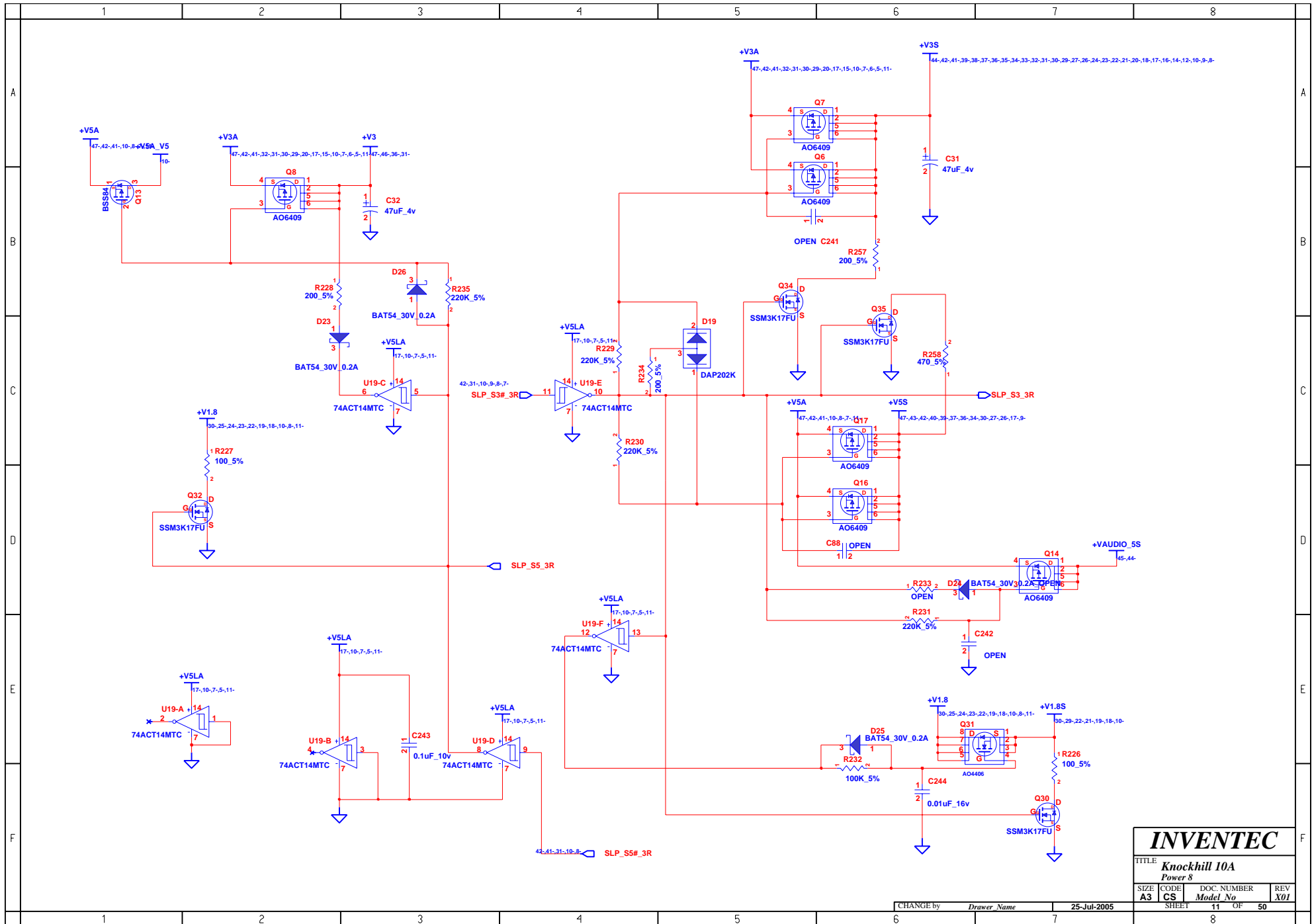
SHEET 3 OF 50







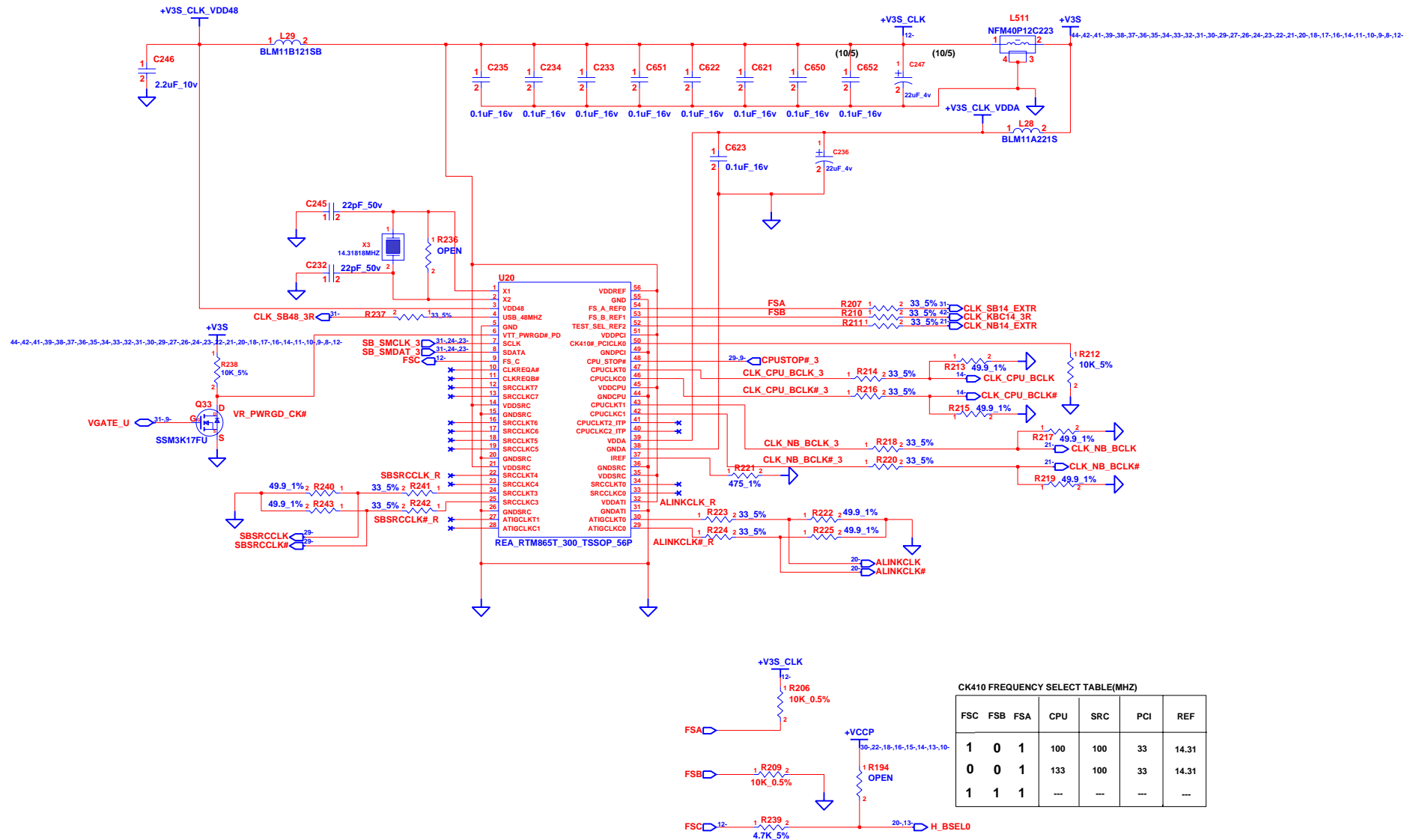




INVENTEC

TITLE			
Knockhill 10A			
Power 8			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
SHEET		11	OF 50

CHANGE by Drawer Name 25-Jul-2005



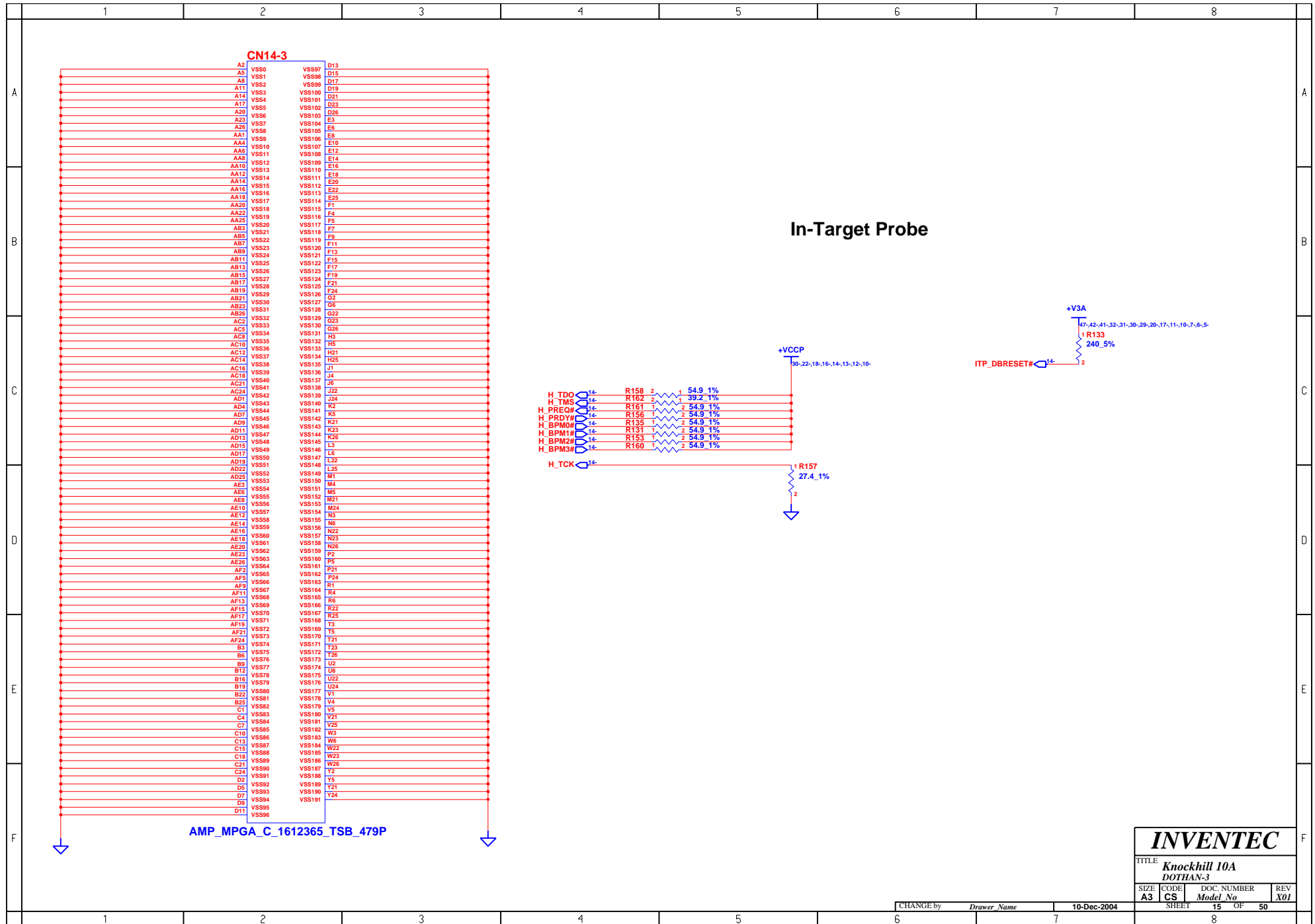
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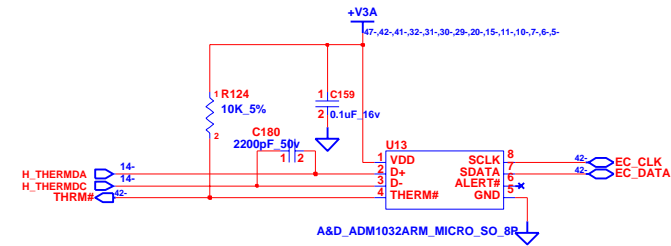
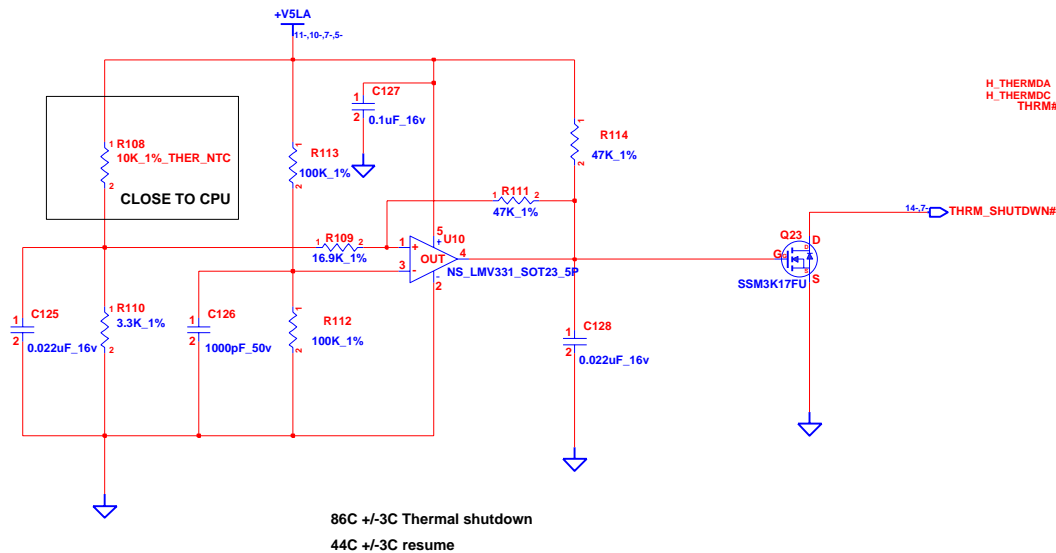
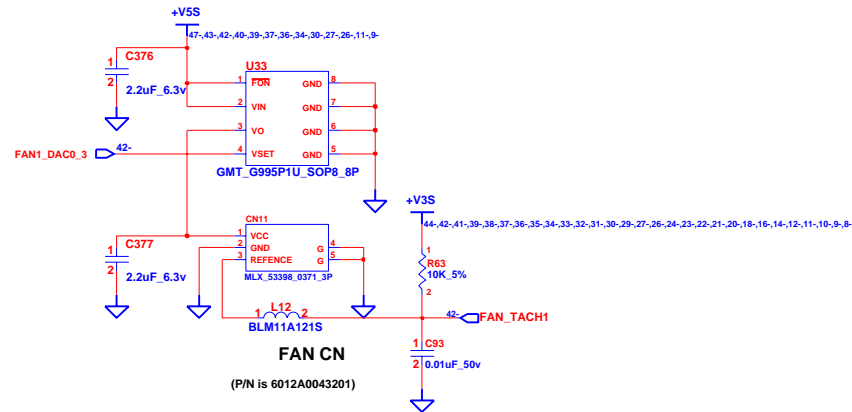
TITLE: **Knockhill 10A**
Clock

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by: *Drawer Name* 20-Dec-2004

SHEET 12 OF 50

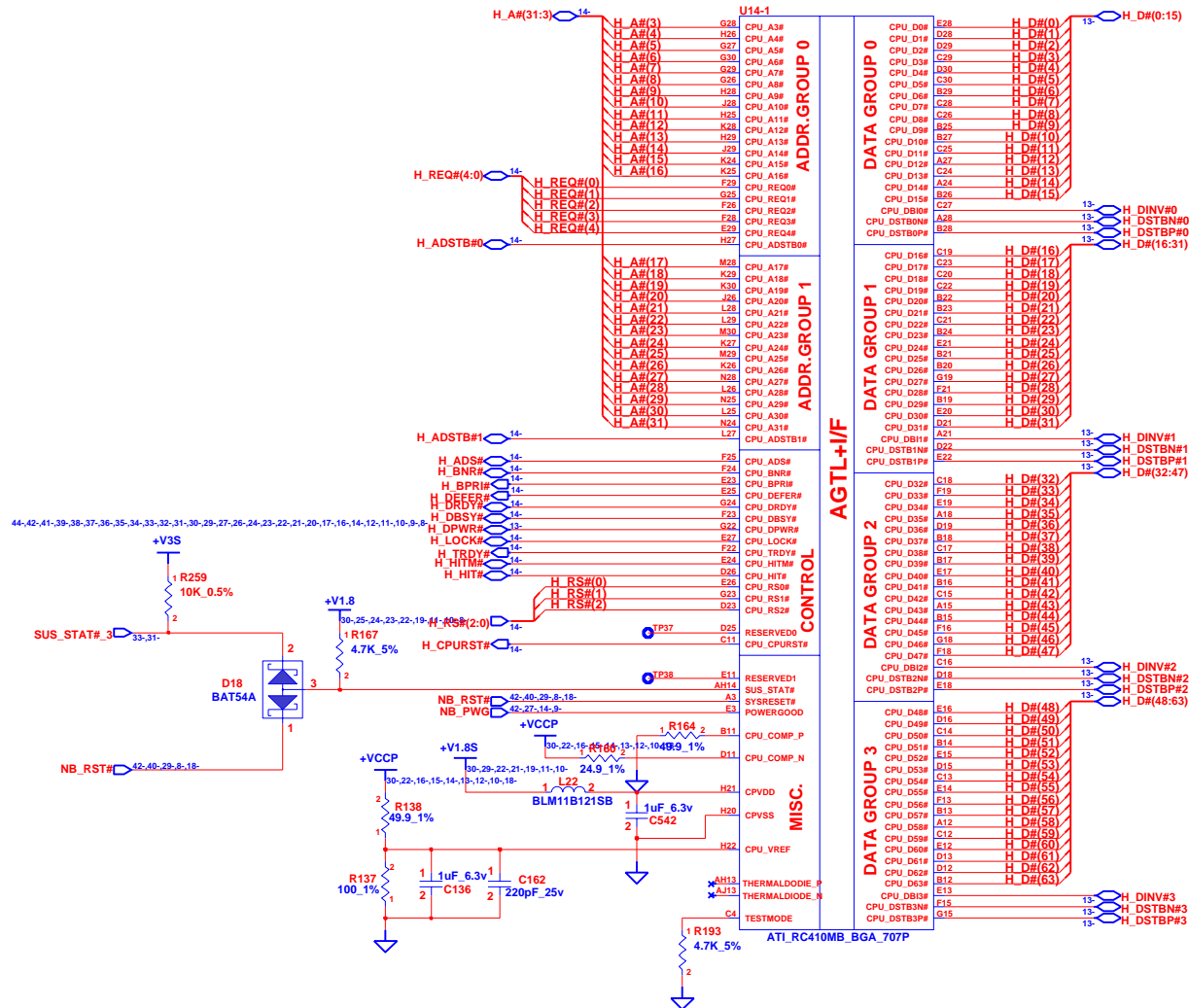




INVENTEC

TITLE			
Knockhill 10A			
Fan And Thermal			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
SHEET		17	OF 50

CHANGE by *Drawer Name*



INVENTEC

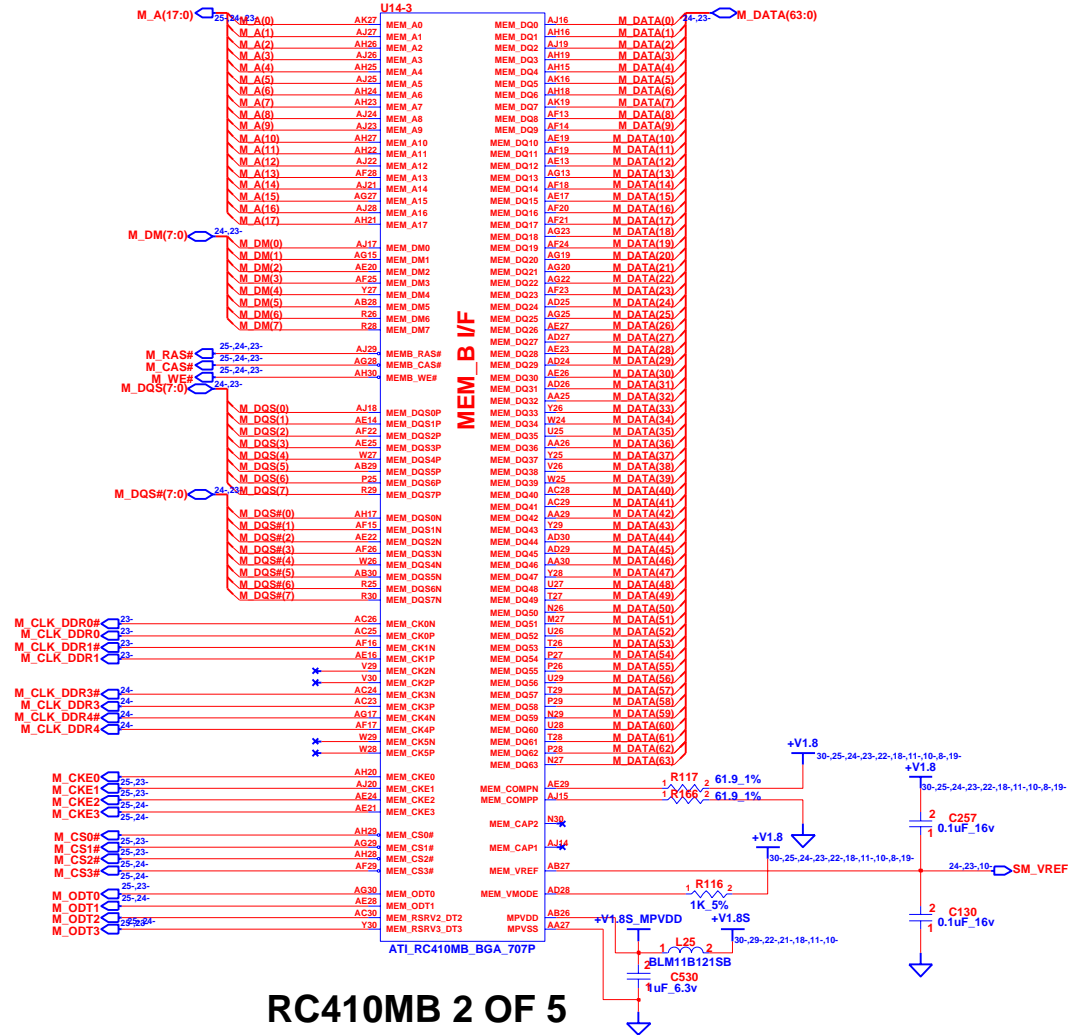
TITLE: **Knockhill 10A**

NB-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by: *Drawer Name* 21-Dec-2004

SHEET 18 OF 50



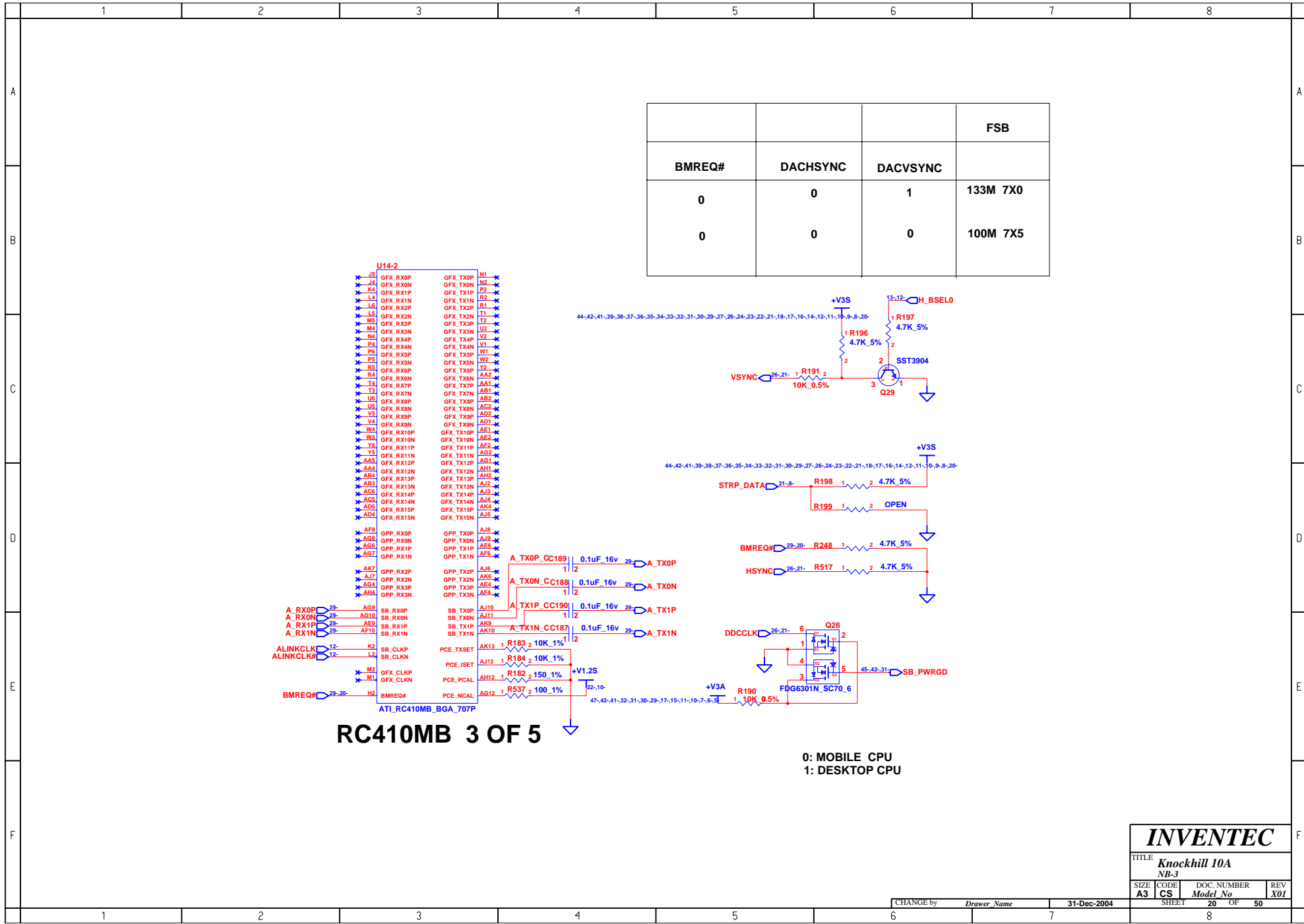
MEMORY MODE SELECT

MEM_VMODE	DDR MODE
L	2.5V DDR
H	1.8V DDRII

INVENTEC

TITLE Knockhill 10A			
NB-2			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
SHEET 19		OF 50	

CHANGE by *Drawer Name* 25-Apr-2005

[illegible][illegible]

The schematic diagram illustrates the electrical design of the RC410MB board. It features multiple power planes (+V1.8S, +V1.8S_AVDDQ, +V1.8S_PLLVDD, +V3S, +V3S_AVDD) and various decoupling components like capacitors (C218, C219, 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, C999, C1000, C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1009, C1010, C1011, C1012, C1013, C

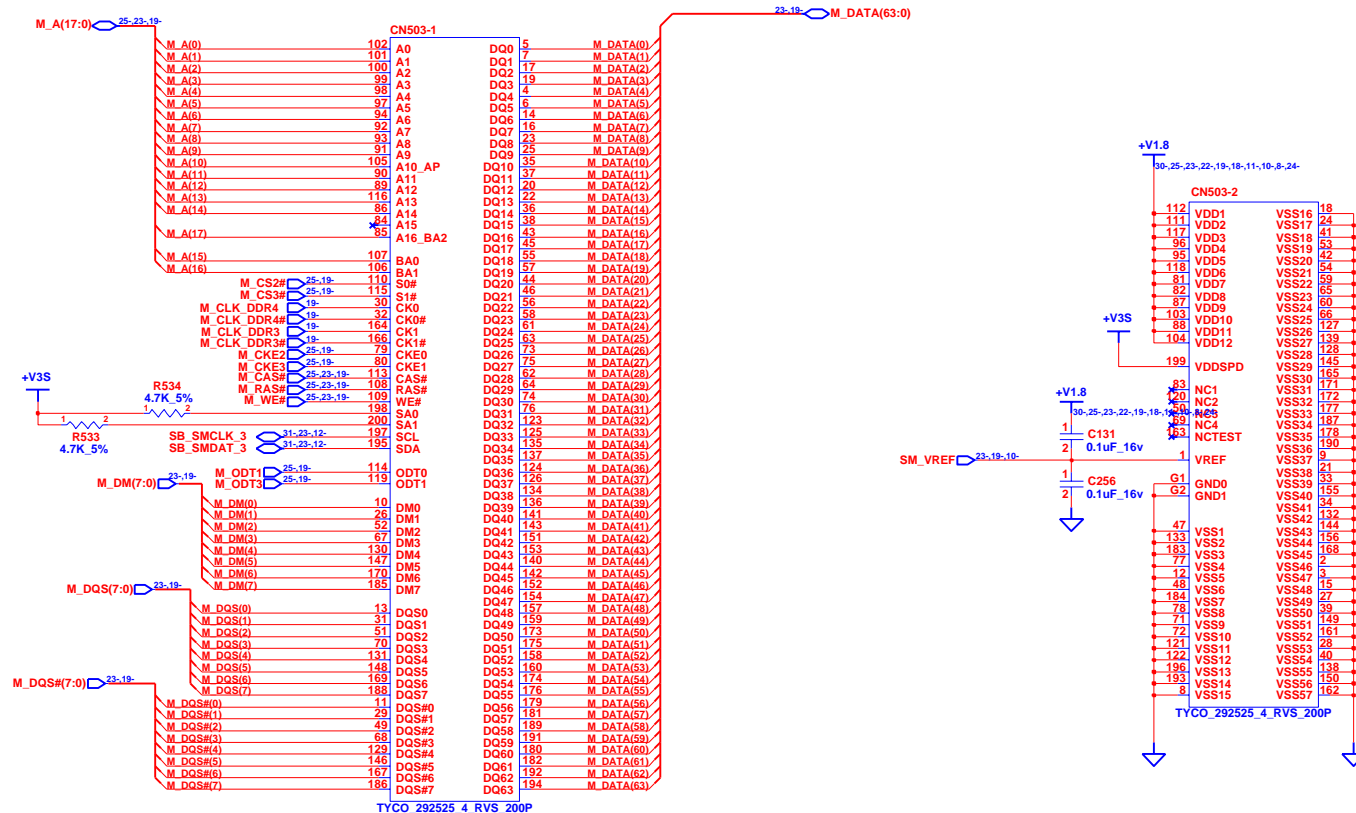
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TITLE	<i>Knockhill 10A DDR-1-SO-DIMM0</i>
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SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
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CHANGE by	<i>Drawer Name</i>	25-Apr-2005
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SHEET 23 OF 50



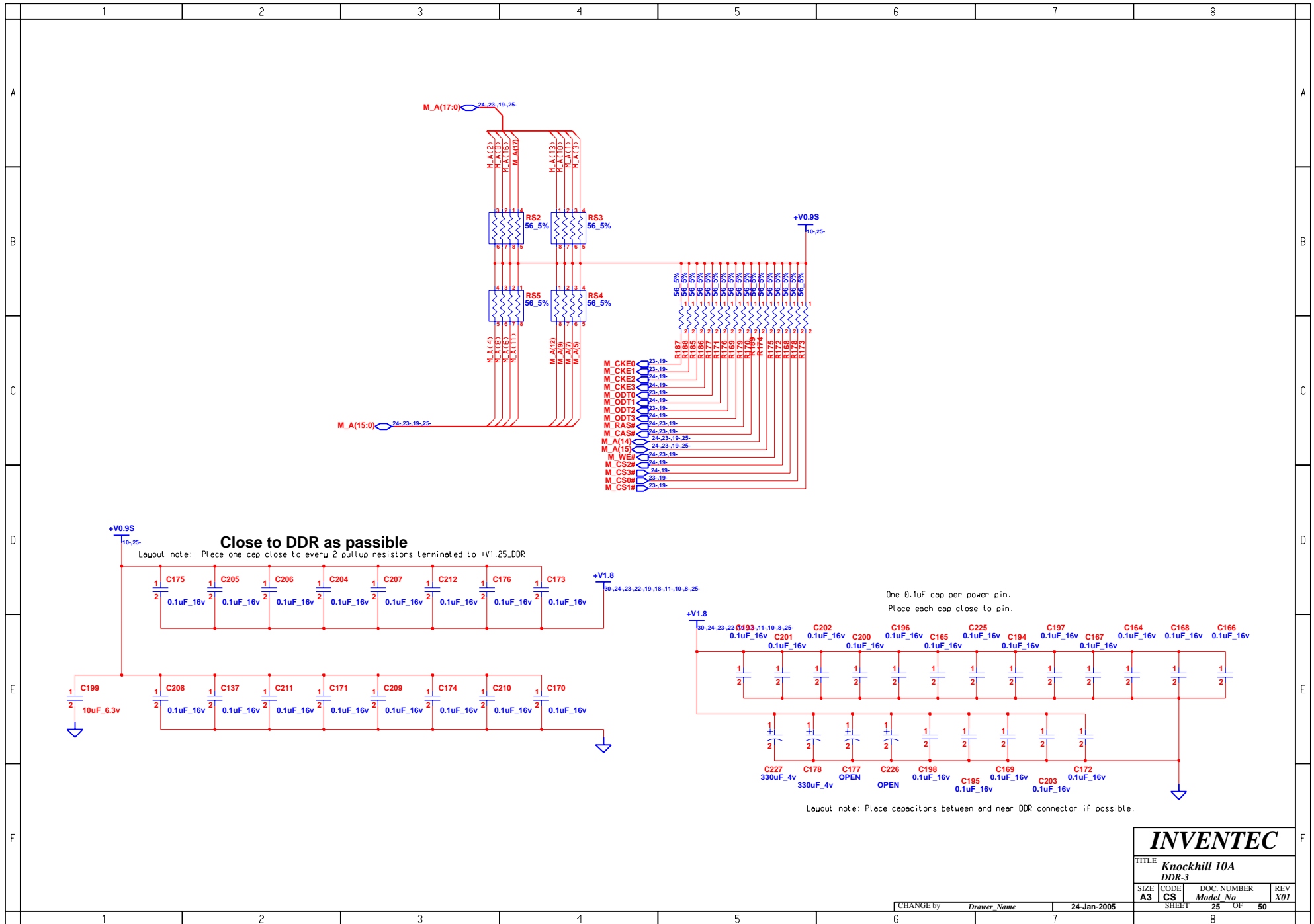
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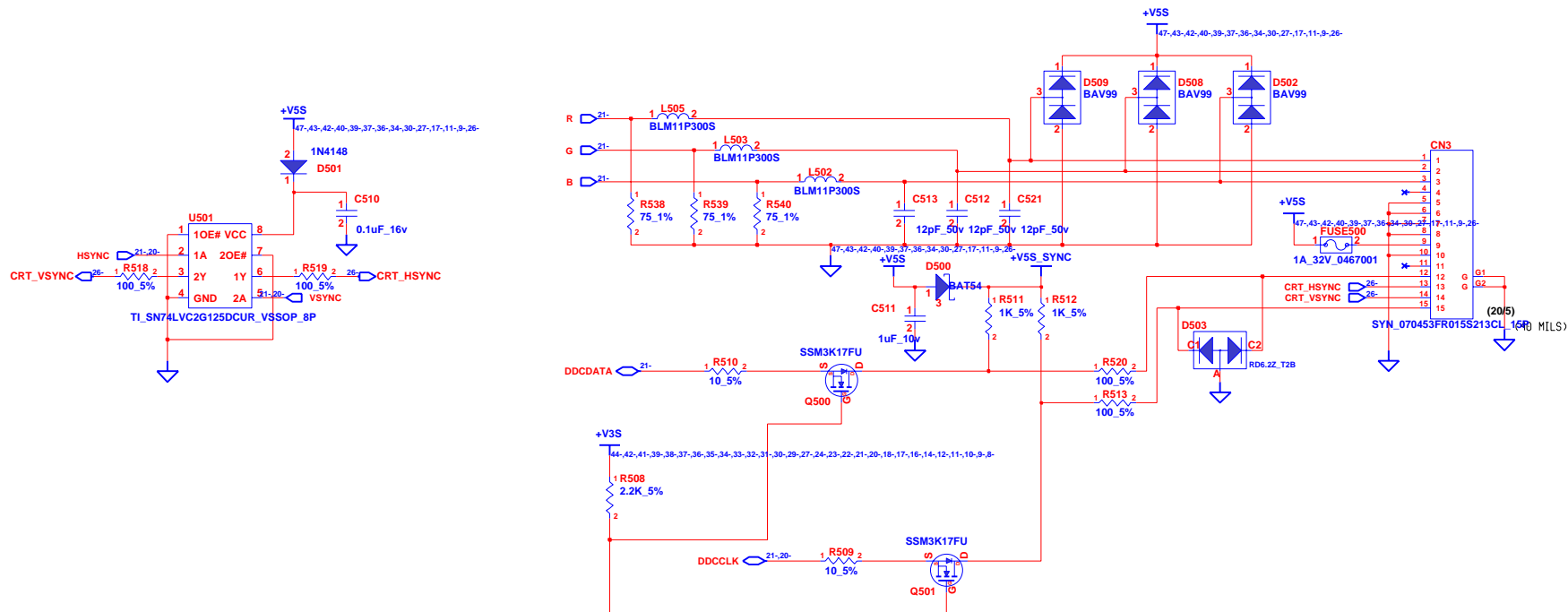
INVENTEC

TITLE			
Knockhill 10A			
DDR-2-SO-DIMM1			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by Drawer Name 31-Dec-2004

SHEET 24 OF 50





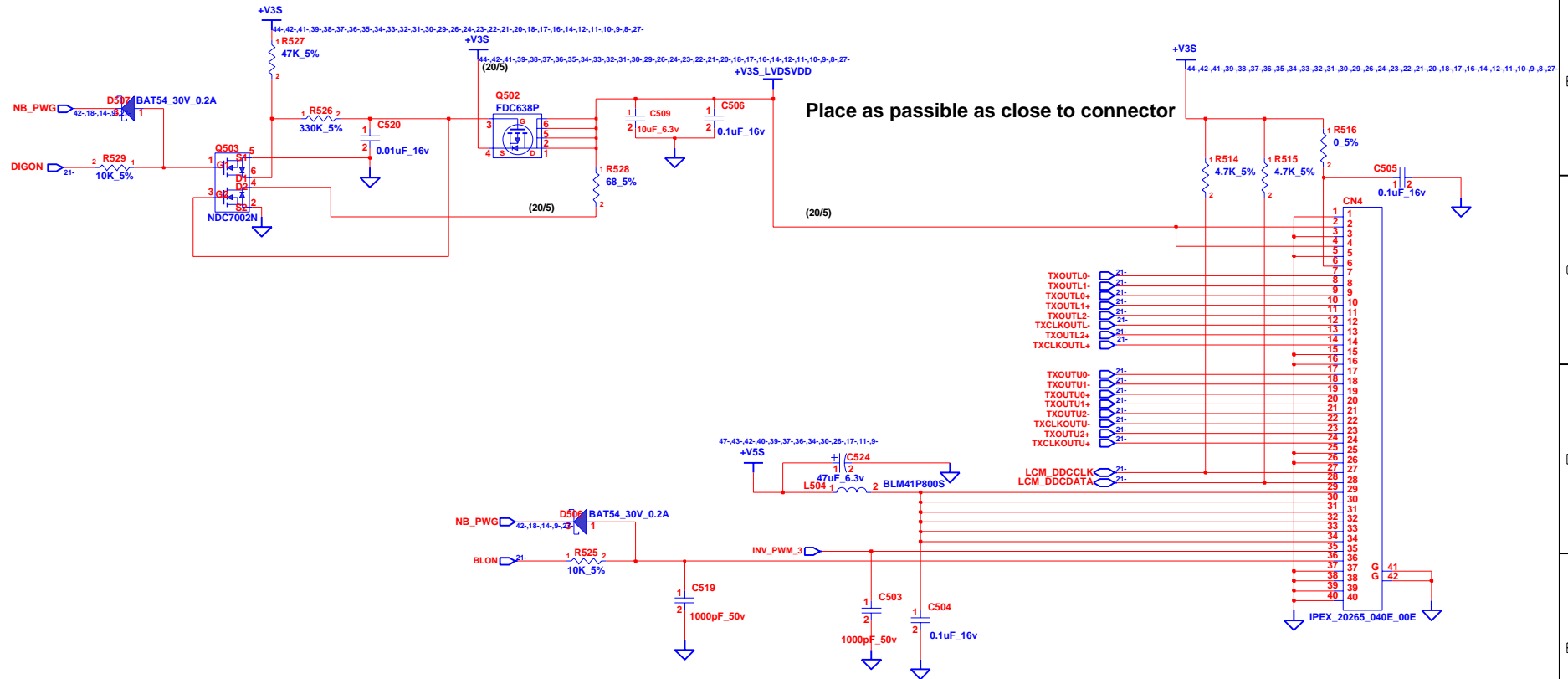
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TITLE
Knockhill 10A
CRT

SIZE CODE DOC. NUMBER REV
A3 CS Model No **19-Nov-2004** **X01**

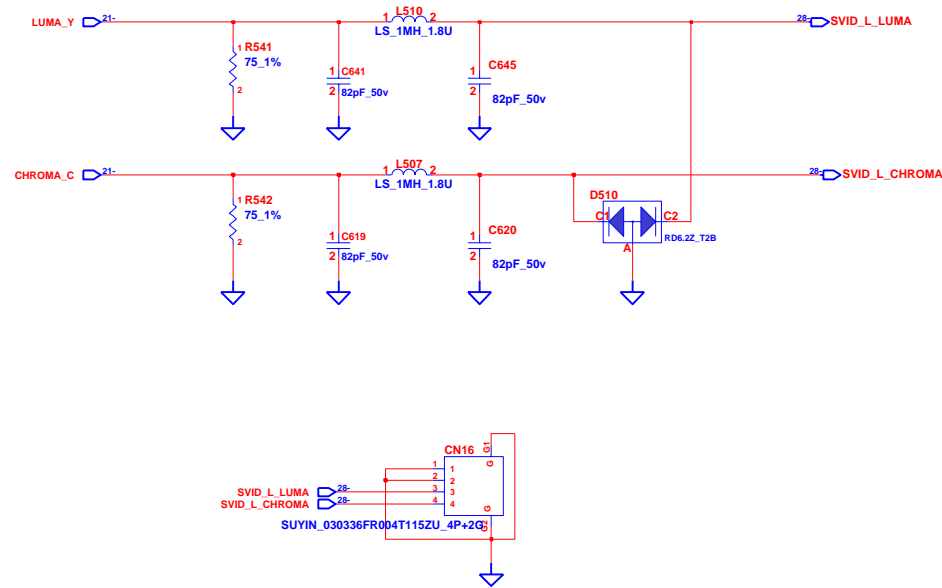
CHANGE by *Drawer Name* 19-Nov-2004

SHEET 26 OF 50



INVENTEC

TITLE Knockhill 10A LVDS			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by <i>Drawer Name</i>		14-Dec-2004	
SHEET 27		OF 50	



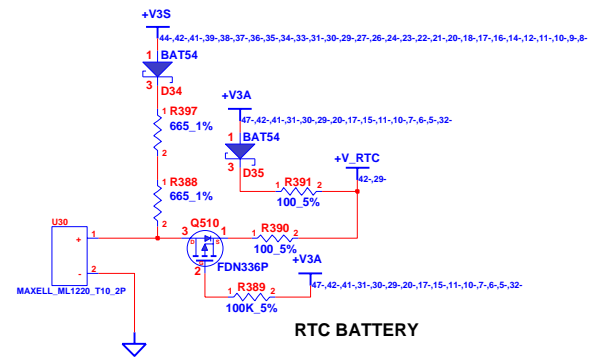
INVENTEC

TITLE
Knockhill 10A
Power 7

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by *Drawer Name* 1-Jul-2005

SHEET 28 OF 50



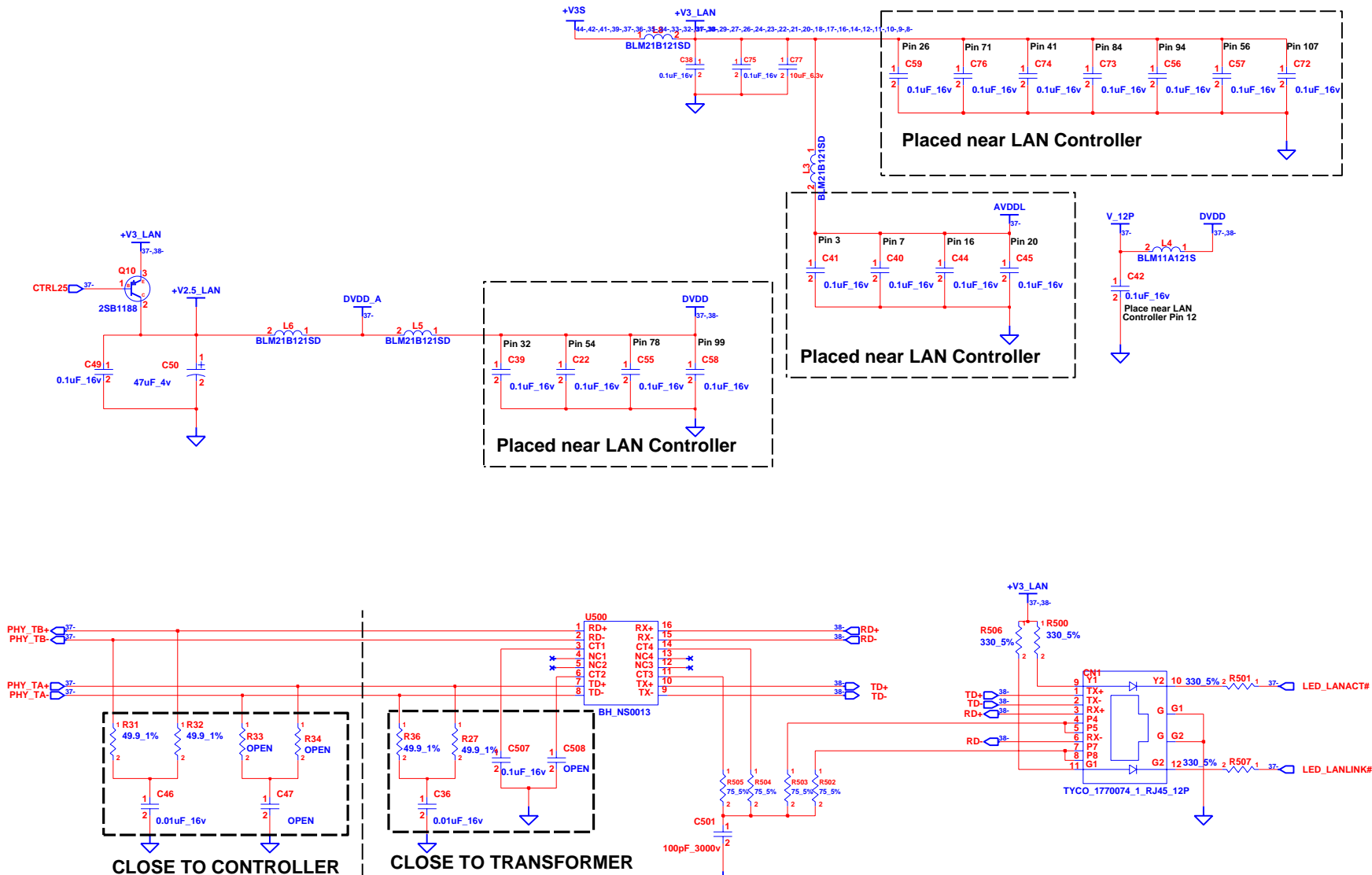
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TITLE Knockhill 10A			
NB-4			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		13-Sep-2005	
DRAWN by			
CHECKED by			
APPROVED by			
SHEET		32	OF 50

[illegible]

INVENTEC

TITLE	<i>Knockhill 10A</i> <i>LAN-1</i>
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SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV X01
SHEET 37 OF 50			



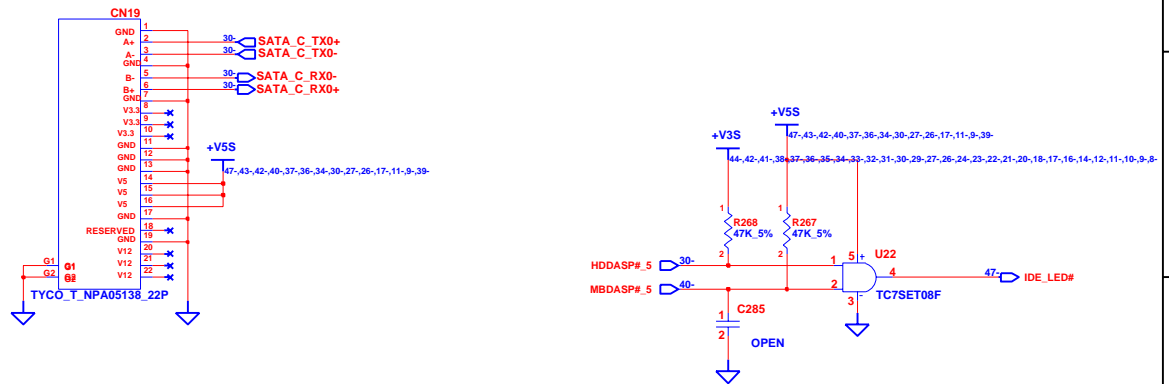
LAYOUT NOTE: THERE ARE RESISTORS NEAR TO CAPACITORS

INVENTEC

TITLE			
Knockhill 10A			
LAN-2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

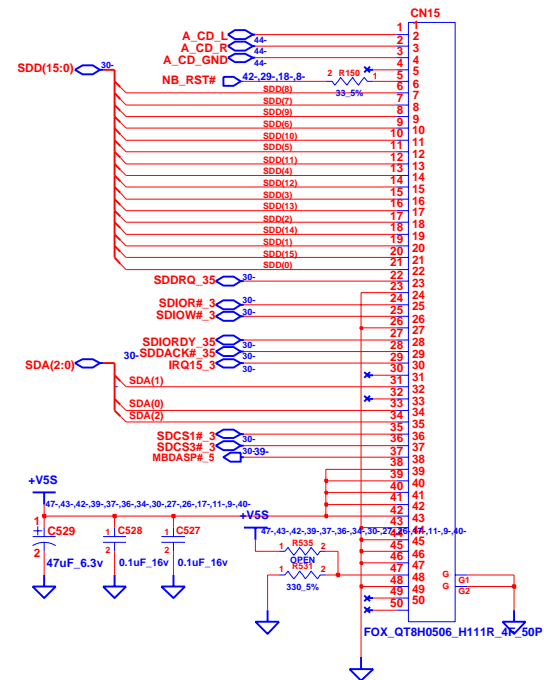
CHANGE by Drawer Name 17-Nov-2004

SHEET 38 OF 50

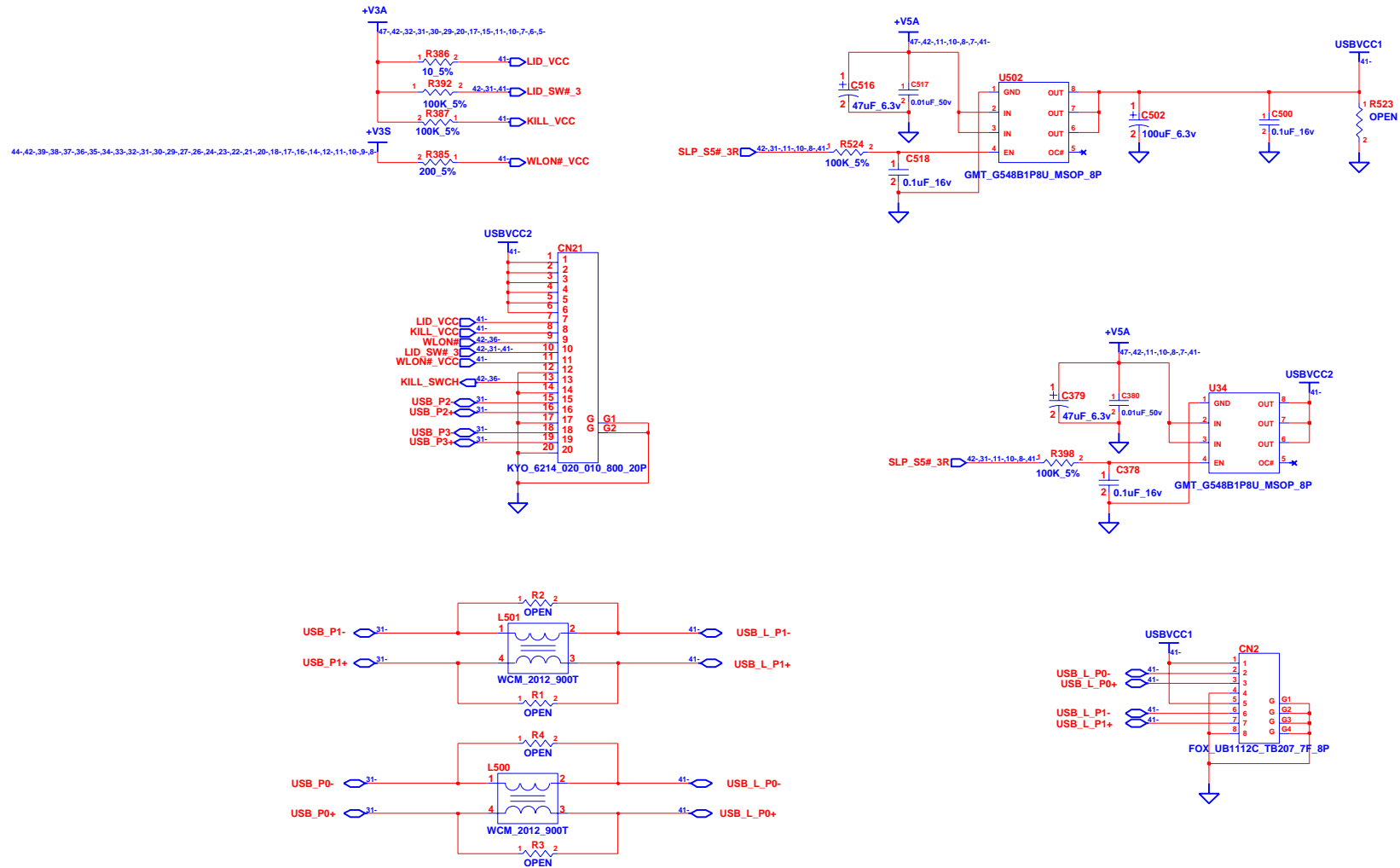


INVENTEC			
TITLE Knockhill 10A HDD			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
SHEET 39 OF 50			

CHANGE by *Drawer Name* 10-Dec-2004

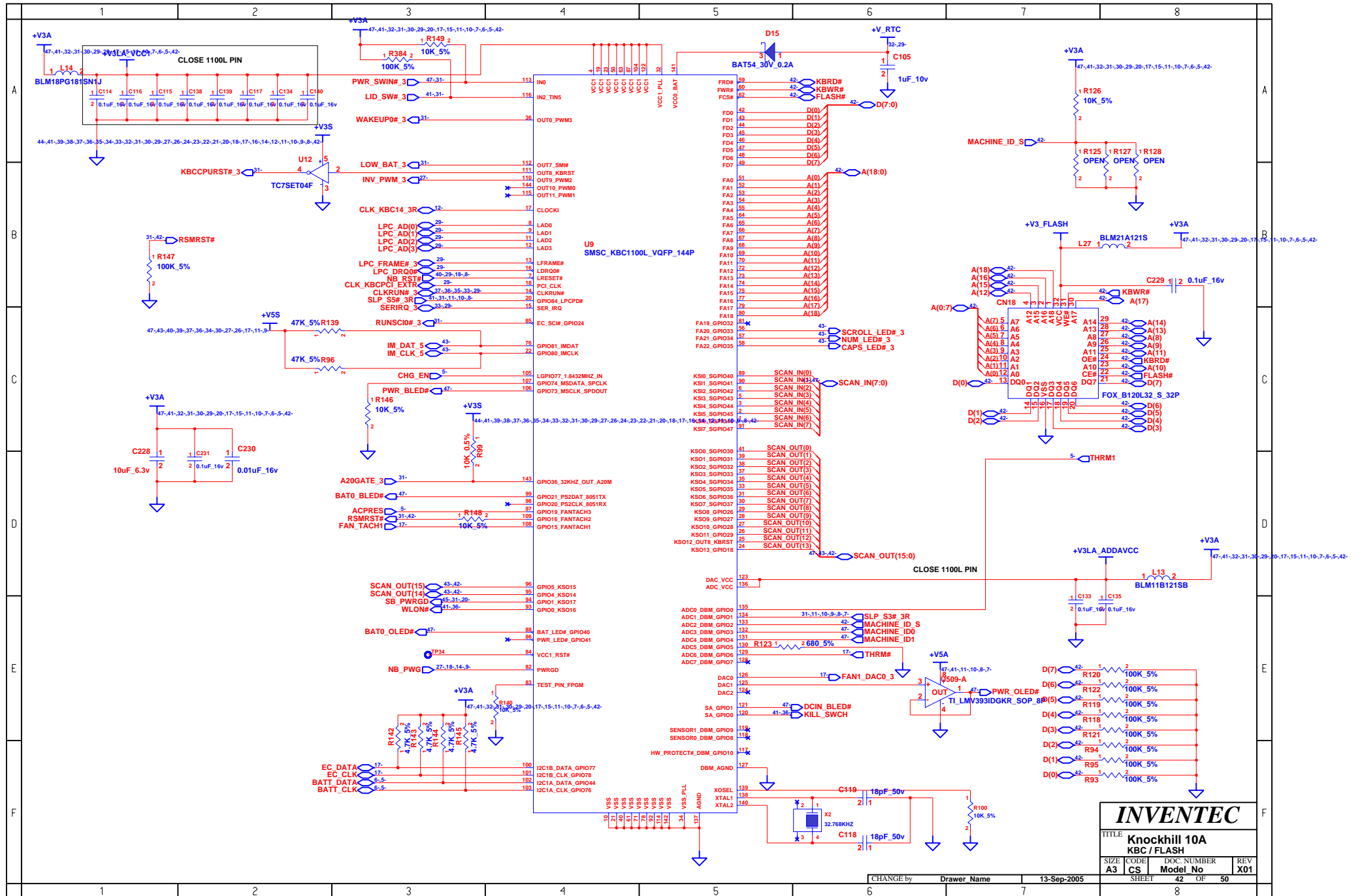


INVENTEC			
TITLE Knockhill 10A			
ODD			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV X01
CHANGE by Drawer Name		21-Dec-2004	
SHEET 40		OF 50	

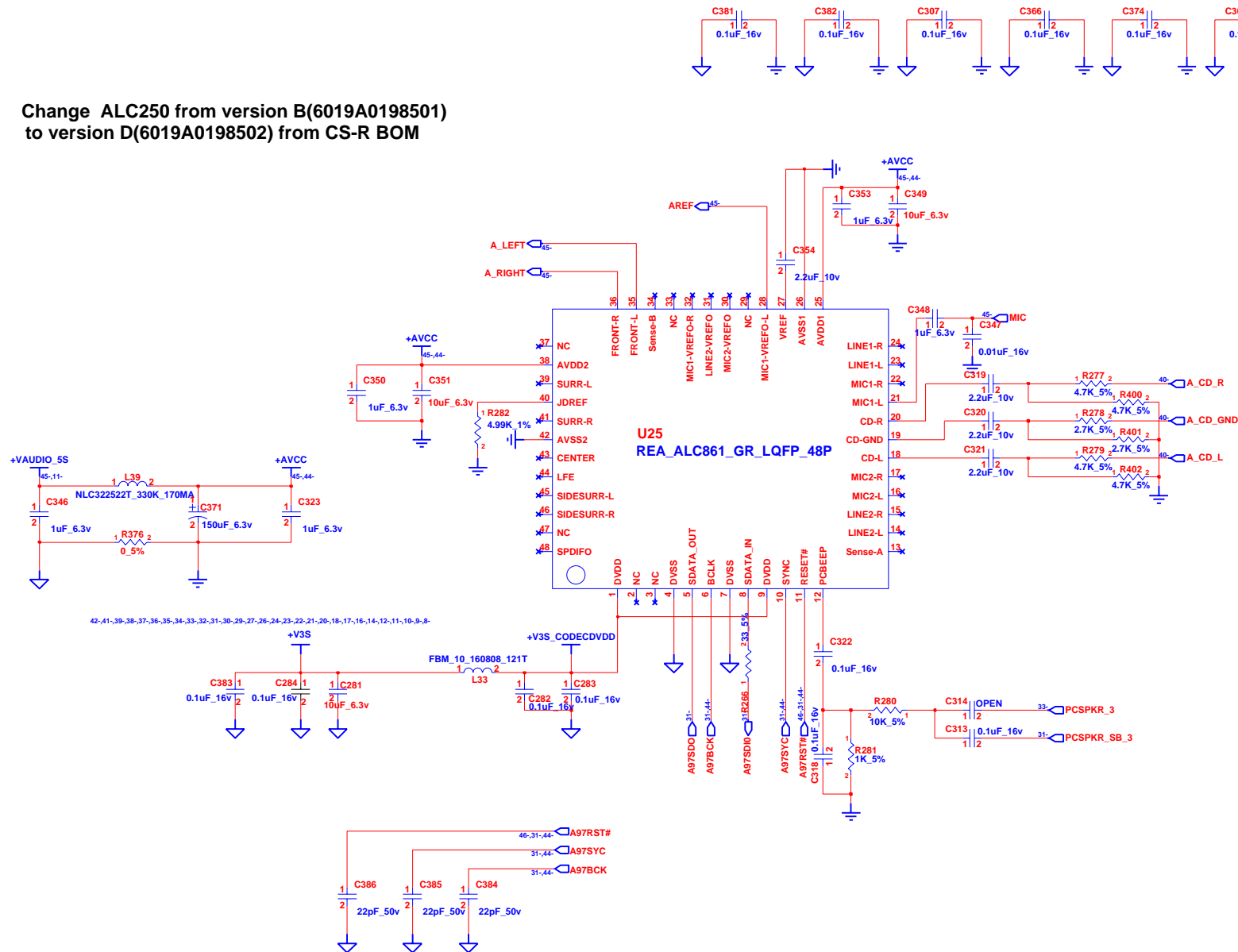


INVENTEC

TITLE			
Knockhill 10A			
USB / S-Video			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01
CHANGE by		11-Nov-2004	
SHEET		41	OF 50



Change ALC250 from version B(6019A0198501)
to version D(6019A0198502) from CS-R BOM



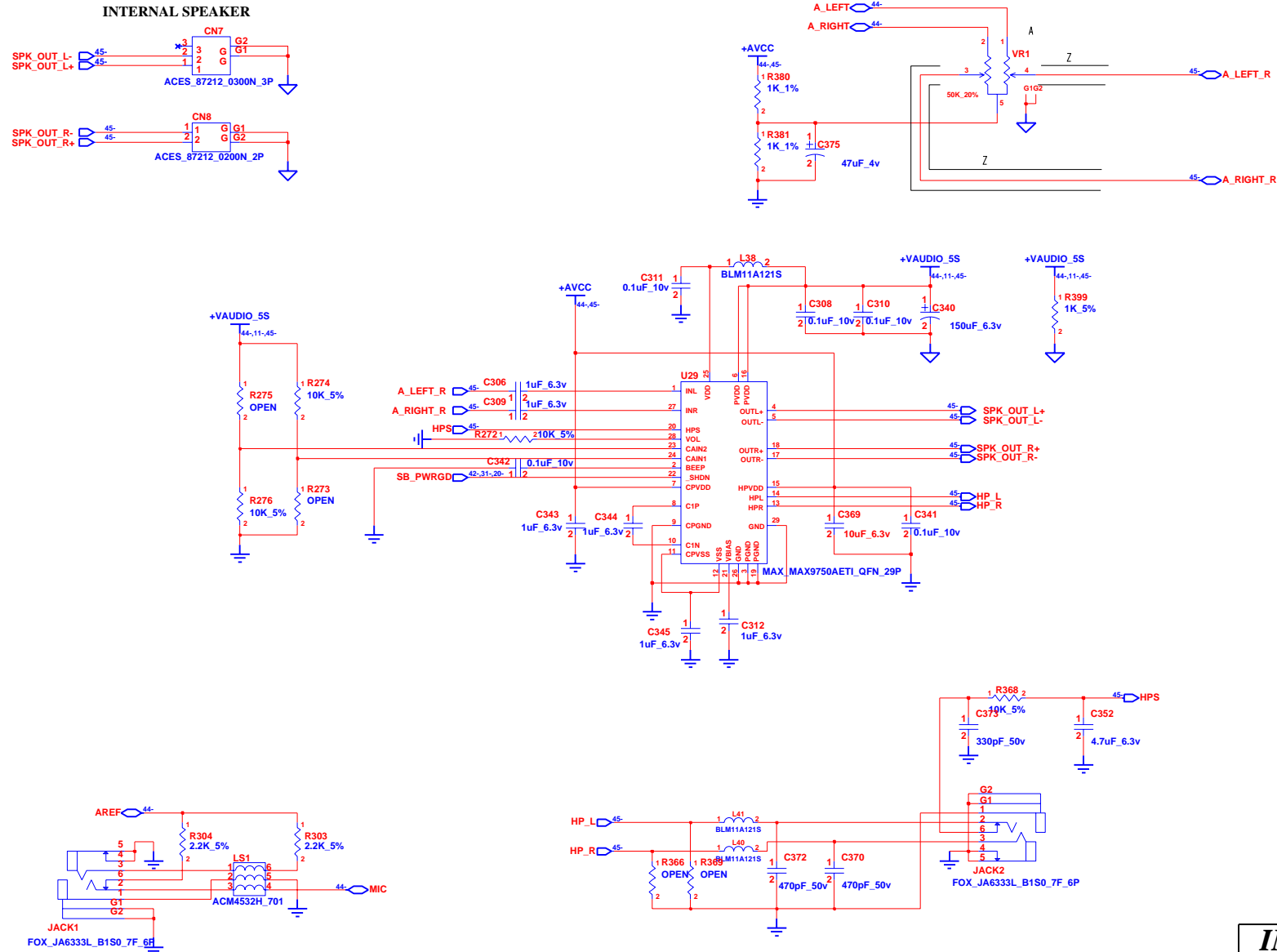
INVENTEC

TITLE: **Knockhill 10A**
Audio-I-Codec

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by: *Drawer Name* 10-Dec-2004

SHEET 44 OF 50



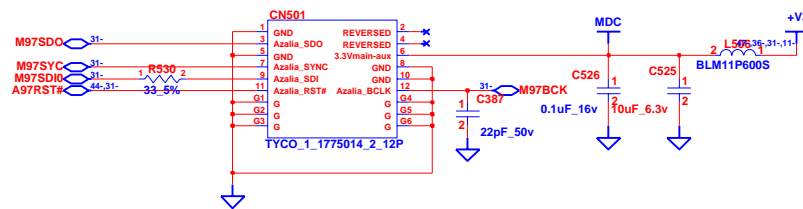
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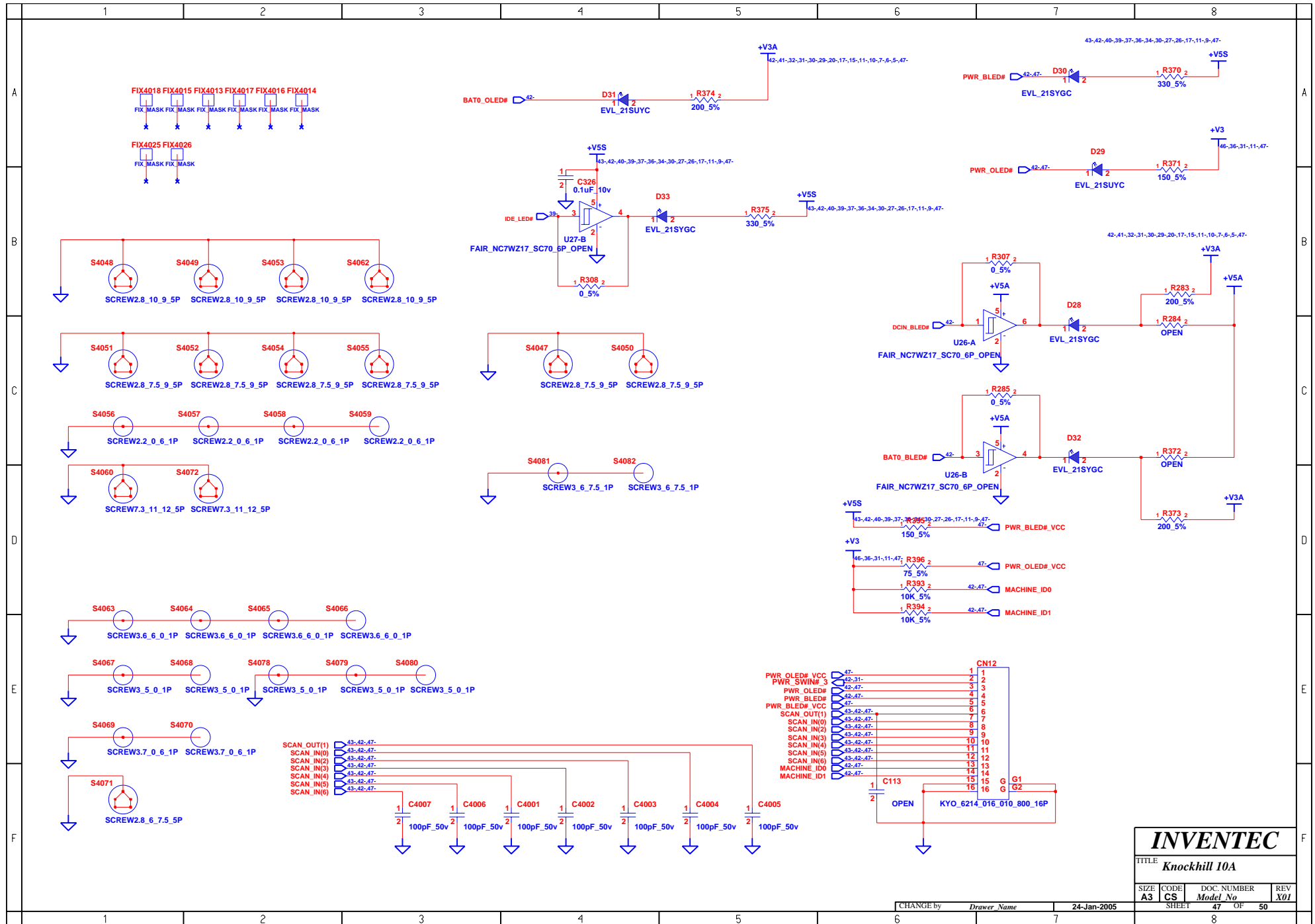
TITLE
Knockhill 10A
Audio-3-Lin IN/OUT

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by *Drawer Name* 17-Nov-2004

SHEET 45 OF 50





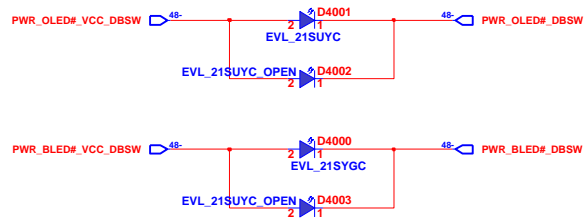
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TITLE: **Knockhill 10A**

SIZE: **A3** CODE: **CS** DOC. NUMBER: **Model No** REV: **X01**

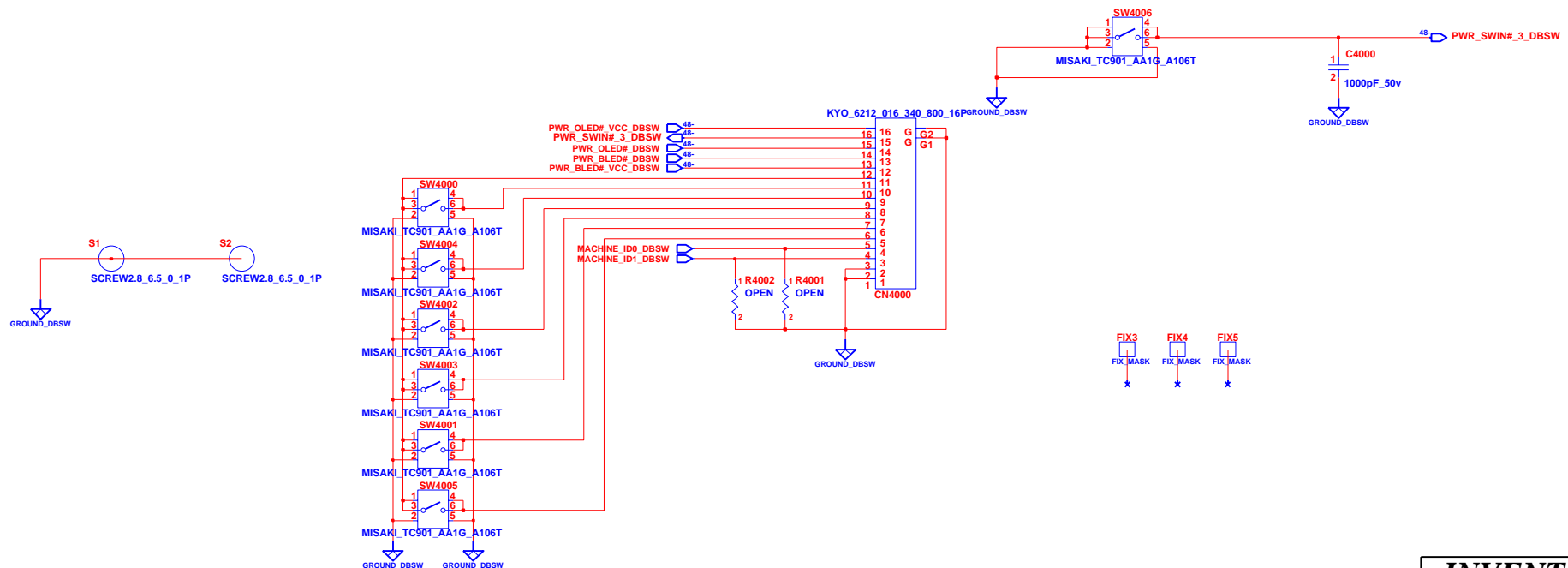
CHANGE by: **Drawer Name** 24-Jan-2005

SHEET: **47** OF: **50**



LED & SWITCH

POWER SWITCH



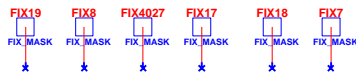
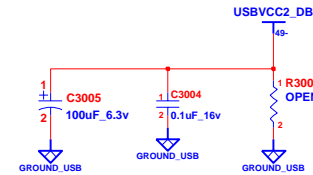
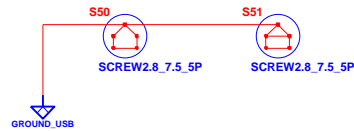
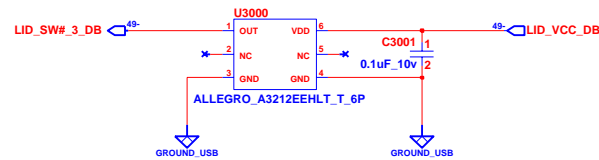
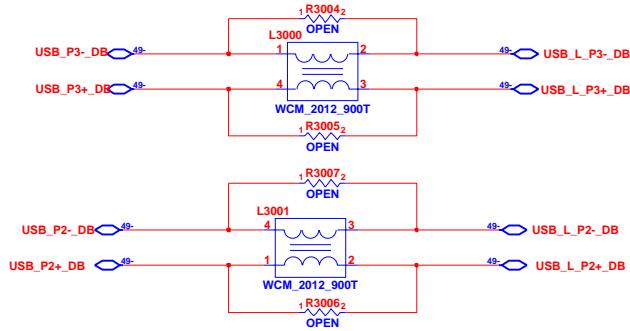
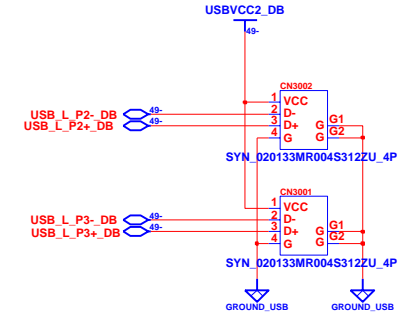
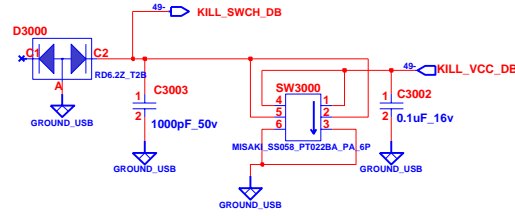
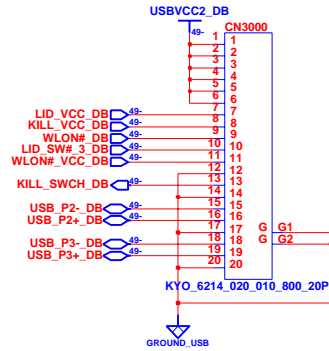
INVENTEC

TITLE			
Knockhill 10A			
Bottom Board			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	X01

CHANGE by *Drawer Name* 8-Nov-2004

SHEET 48 OF 50

KILL SWITCH



INVENTEC

TITLE: **Knockhill 10A**
USB/1394/SVIDEO Board

SIZE: **A3** CODE: **CS** DOC. NUMBER: **Model No** REV: **X01**

CHANGE by: *Drawer Name* 6-Aug-2005

SHEET 49 OF 50

