



Am186CC Customer Development Platform Schematics Main Board

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Rev 1.0: Original design

Rev 1.1: TMROUT0[PI028] changed to SRDY[PI035].
Nets on DS34C86T's changed.
Pull-ups and pull-downs added to MACH.
Pinouts corrected on diode and MOSFET on USB page.
RXDC[PI042] changed from TMRINO[PI027].
5V power changed to a switching regulator.
Fuses changed to 2A.
Pinouts corrected on diode and flyback transformer on power page.

Rev 2.0: Sheet 2: Add series terminators in 0603 package.
Removed TP1, TP4 and TP5.
Sheet 3: Removed C42, C45, C48, C52, R106 and removed CAP TH-2 drawing.
Changed R32 to C123.
Updated tables and noted.
Sheet 4: Changed JP7 to 2x2 removing FLASHCS#.
Sheet 5: Removed R30, R31, R36, R37, respectively.
Changed JP4 & JP5 to JP18 & JP13, respectively.
Sheet 6: Changed HDLC DCE LED's circuit.
Changed LED part drawing.
Changed label for C1.
Sheet 7: Changed HDLC DCE LED's circuit.
Changed LED part drawing.
Changed label for C6.
Sheet 8: Modified tables.
Sheet 9: Added series terminators.
Added UART LED's circuit.
Added series resistance to UART.
Changed capacitors to 1000pf.
Changed label for C21.
Sheet 10: Replaced U21 with TN0200T
Added 100k Pull-down to USB detect circuit.
Changed USB LED to PI08 (ARDY).
Removed C46 and C47.
Added unpopulated 0 Ohm resistors to USB lines from transceiver.
Modified LED part drawing.
Sheet 11: Corrected picture to reflect analyzer configuration.
Sheet 12: Removed R45 & R48.
Removed P29 and fixed illustration.

Rev 2.0: Sheet 13: Added net to VCC5 at P31, pin 55 for 186SEL.
Changed TIPSEL to ENETAEN on P31.
Changed SMIRQ to SHIRQ on P31.
Removed ARDYP on P31.
Removed TIP IRQ Jumpers and replace with 0 Ohm resistors.
Moved C64 and C65 and changed C65 to 0.01uF.
Changed U26 to a different part.
Changed C69 and C119 to 10uF, Y5V, 1210, 25V.
Changed C63 to two 330uF, E-CASE, 10V caps.
Changed C120 to three 330uF, E-CASE, 10V caps.
Sheet 15: Added 10k resistor to SW6, pin 1 for DCE Multidrop Mode.
Removed RDXDHU from SW2.
Rearranged connections to SW2.

Rev 2.1: Sheet 3: Added UCSX8# pinstrap control
Sheet 9: Changed RS232 DCE UART transceivers circuitry to support full flow control
Sheet 10: Changed USB attach/detach circuit
Sheet 13: Changed TIP ethernet chip select
Added ARDY to TIP connector

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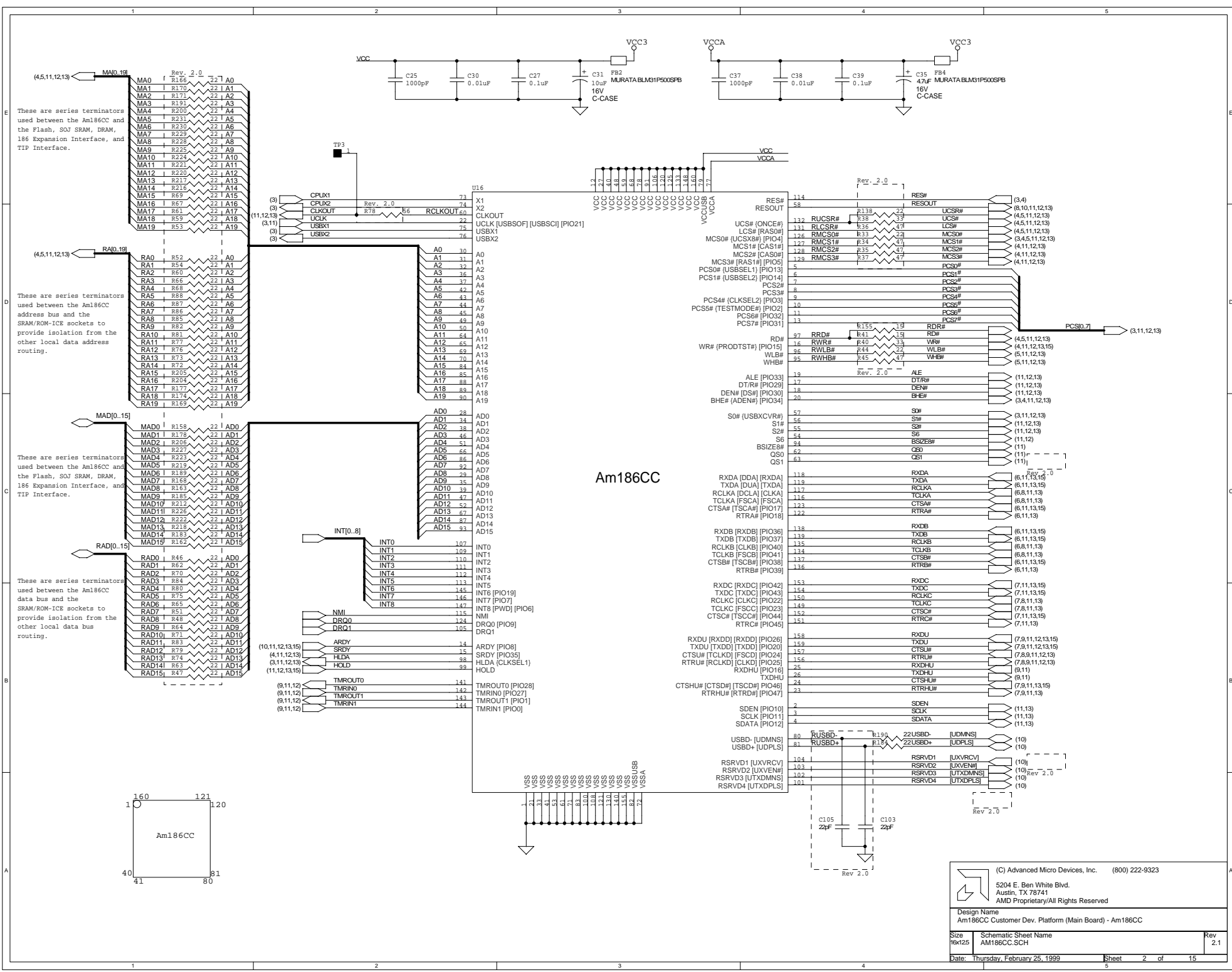
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Design Name
Am186CC Customer Dev. Platform (Main Board)

Size
16x25
Schematic Sheet Name
COVER.SCH
Rev
2.1

Date: Thursday, February 25, 1999 Sheet 1 of 15

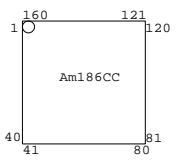


These are series terminators used between the Am186CC and the Flash, SOJ SRAM, DRAM, 186 Expansion Interface, and TIP Interface.

These are series terminators used between the Am186CC address bus and the SRAM/ROM-ICE sockets to provide isolation from the other local data address routing.

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These are series terminators used between the Am186CC data bus and the SRAM/ROM-ICE sockets to provide isolation from the other local data bus routing.



Am186CC

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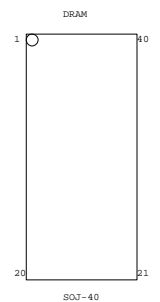
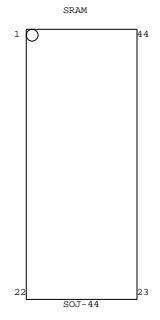
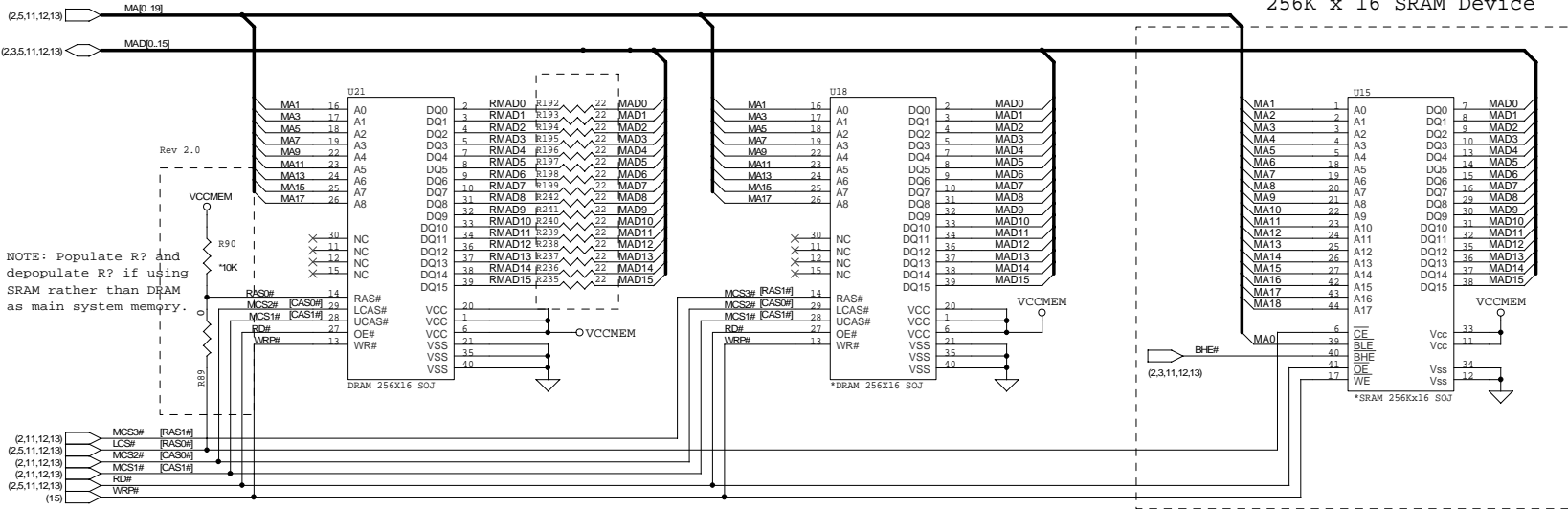
Design Name
 Am186CC Customer Dev. Platform (Main Board) - Am186CC

Size 16x125	Schematic Sheet Name AM186CC.SCH	Rev 2.1
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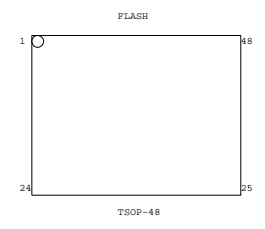
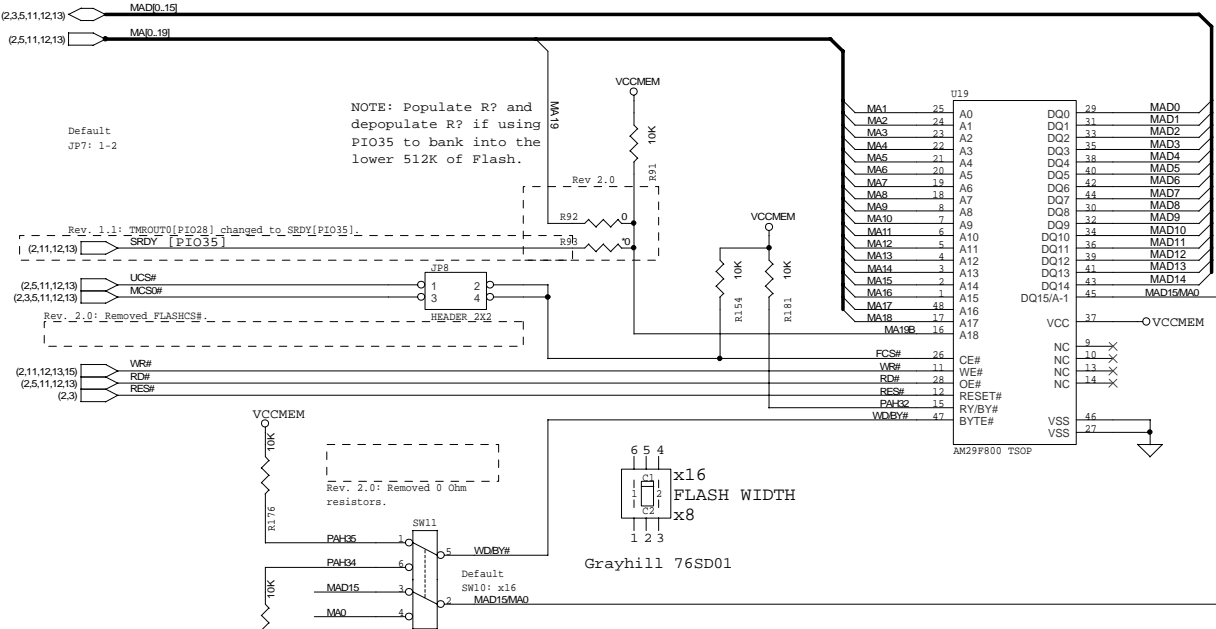
Date: Thursday, February 25, 1999 Sheet 2 of 15

256Kx16 DRAM Devices

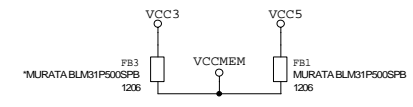
256K x 16 SRAM Device



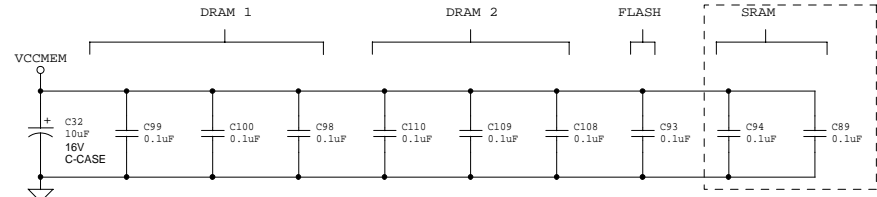
512Kx16 / 1Mx8 FLASH Device



NOTE: Populate one resistor to provide 3V or the other to provide 5V to DRAM and FLASH.



Rev. 1.1: Removed unpopulated caps for SDRAM device and Added caps for SRAM device.



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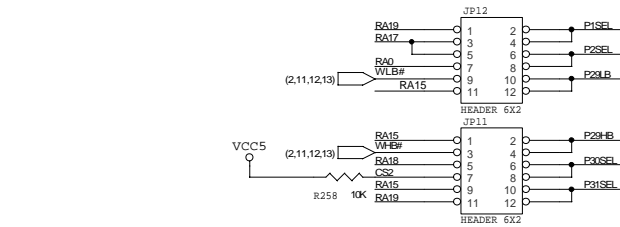
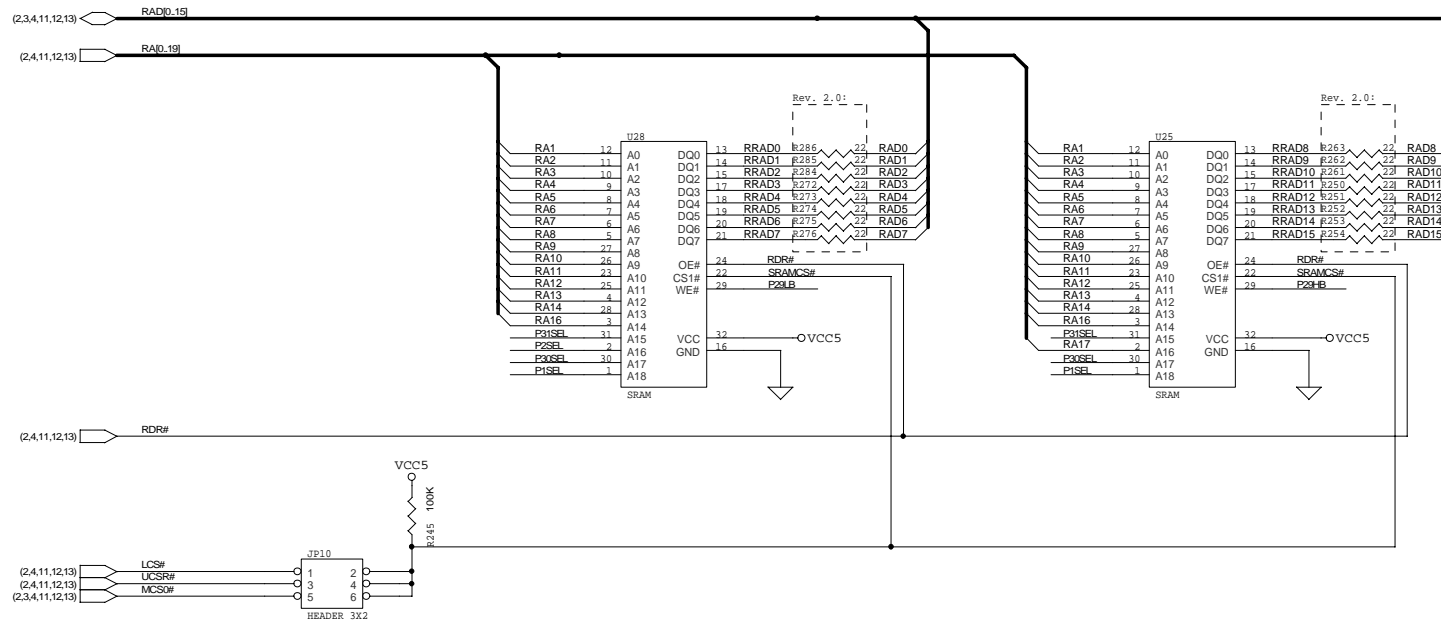
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Design Name
Am186CC Customer Dev. Platform (Main Board) - Memory 1: DRAM/FLASH

Size 16x125	Schematic Sheet Name MEMORY1.SCH	Rev 2.1
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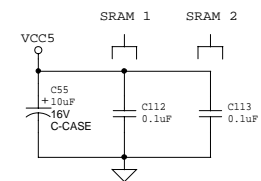
Date: Thursday, February 25, 1999 Sheet 4 of 15

x8 / x16 SRAM Device, ROM ICE

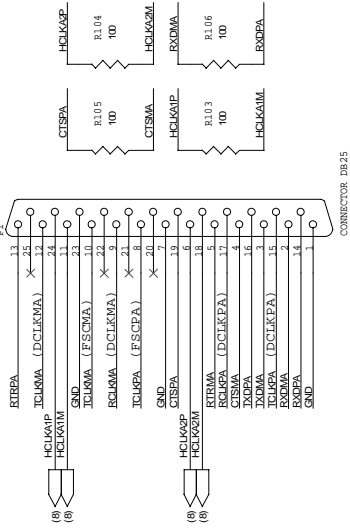


Rev. 2.0:

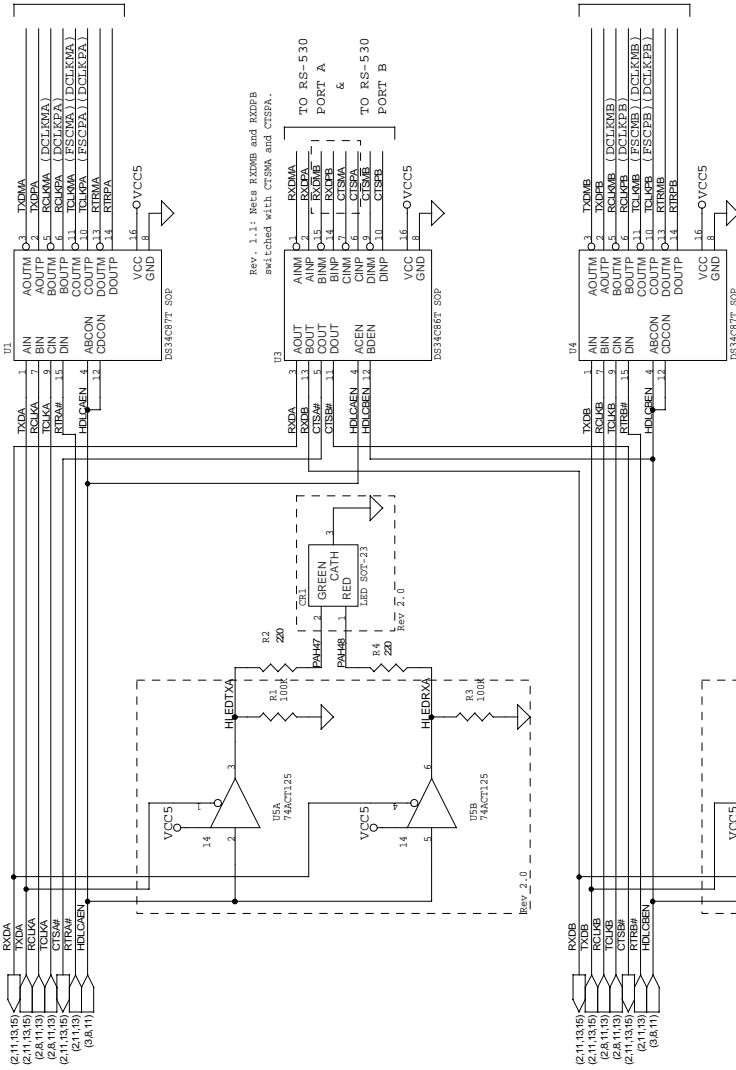
	P1SEL	P2SEL	P29LB	P29HB	P30SEL	P31SEL
SRAM 128Kx8	NC	7-8	9-10	3-4	7-8	9-10
128Kx16	NC	5-6	9-10	3-4	7-8	9-10
512Kx8	3-4	7-8	9-10	3-4	5-6	9-10
512Kx16	1-2	5-6	9-10	3-4	5-6	9-10
ROM 128Kx16	NC	5-6	11-12	1-2	NC	NC
512Kx16	NC	5-6	11-12	1-2	5-6	11-12



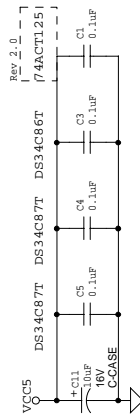
RS-530 PORT A



RS-422 TRANSCIEVERS



Rev. 1.1: Nets RX00B and RX00P switched with CT5MA and CT5PA.



SOT-23 Top View



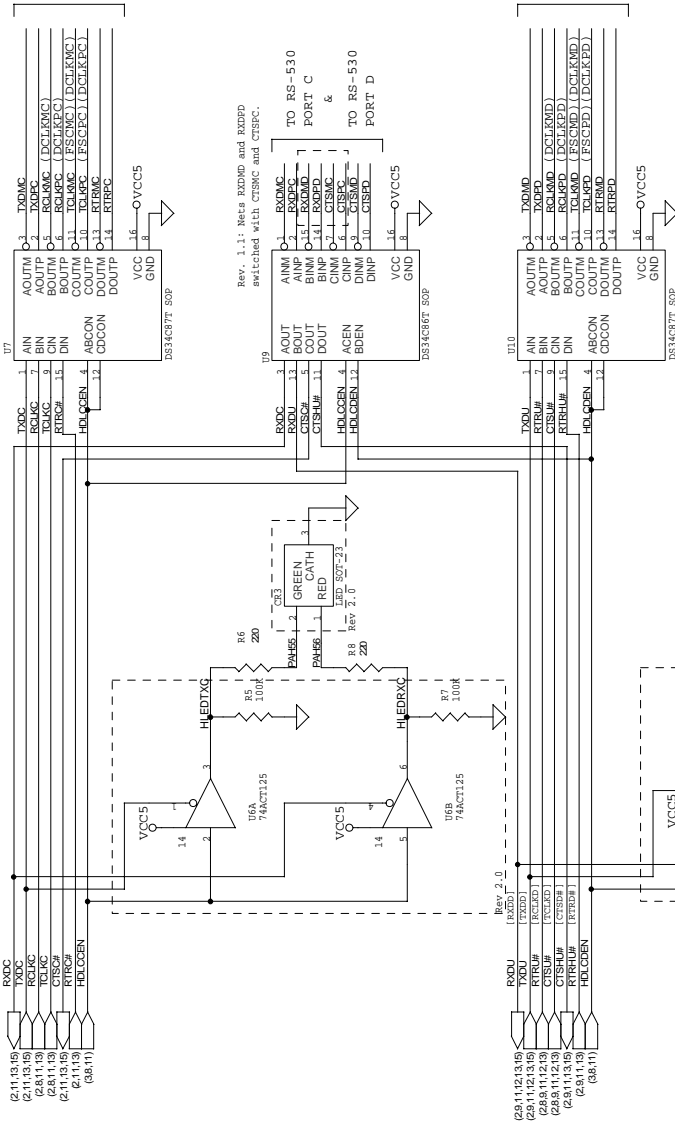
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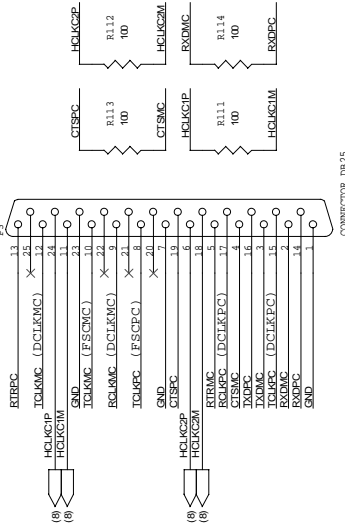
Design Name: Am19CC Customer Dev. Platform (Main Board) - HDLC Transceivers (Page 1)

Size: HDLC1.SCH
Rev: 2.1
Date: Thursday, February 25, 1999
Sheet: 6 of 15

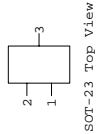
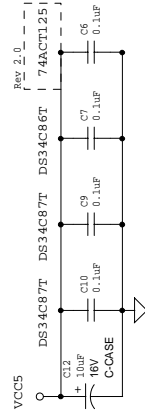
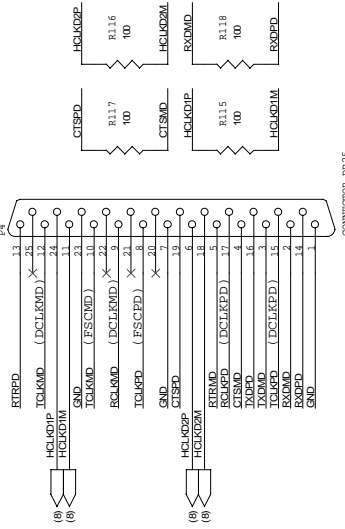
RS-422 TRANSCEIVERS



RS-530 PORT C



RS-530 PORT D



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Design Name

Am196CC Customer Dev. Platform (Main Board) - HDLC Transceivers (Page 2)

Size

16x25

Rev

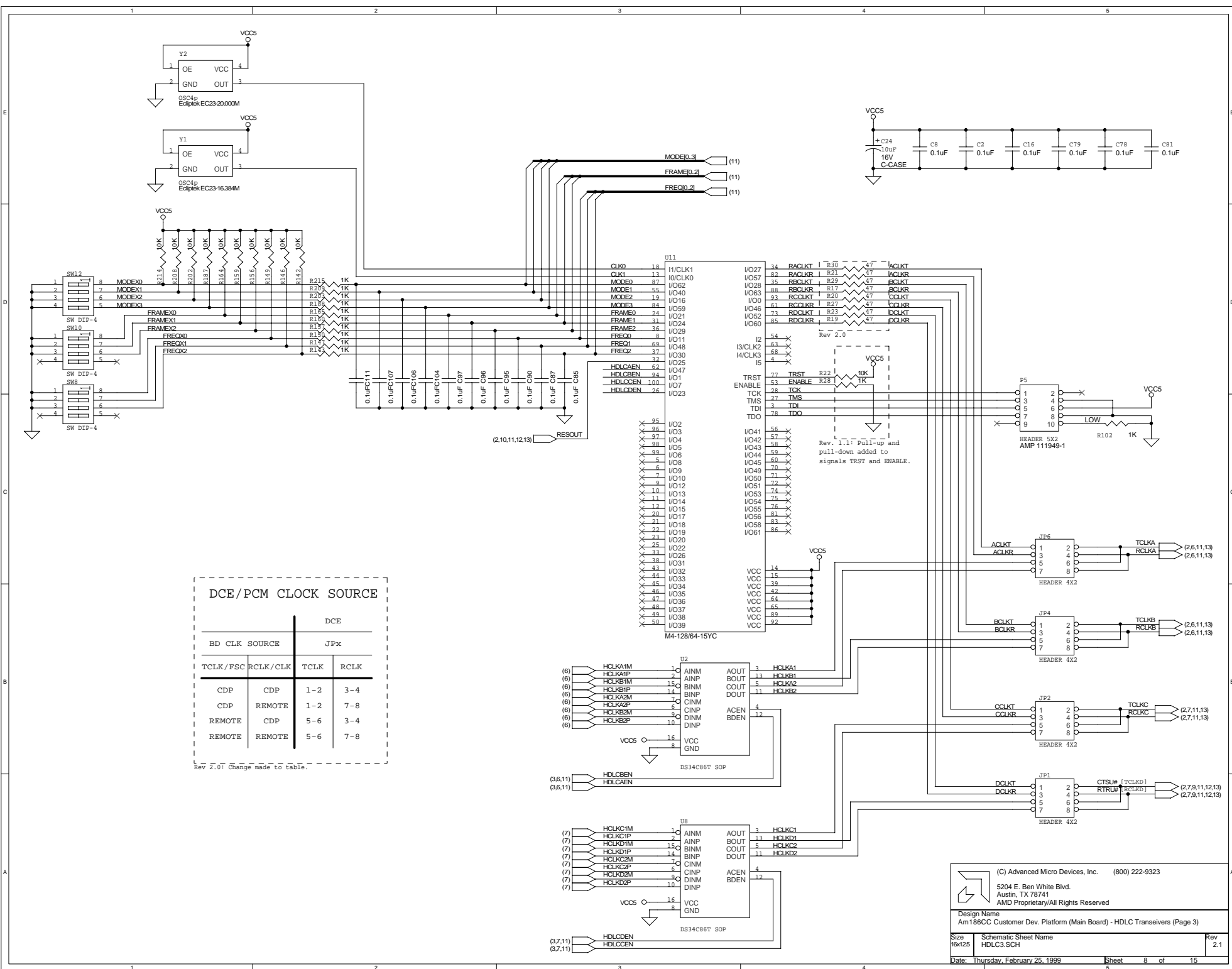
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Date

Thu, February 25, 1999

Sheet

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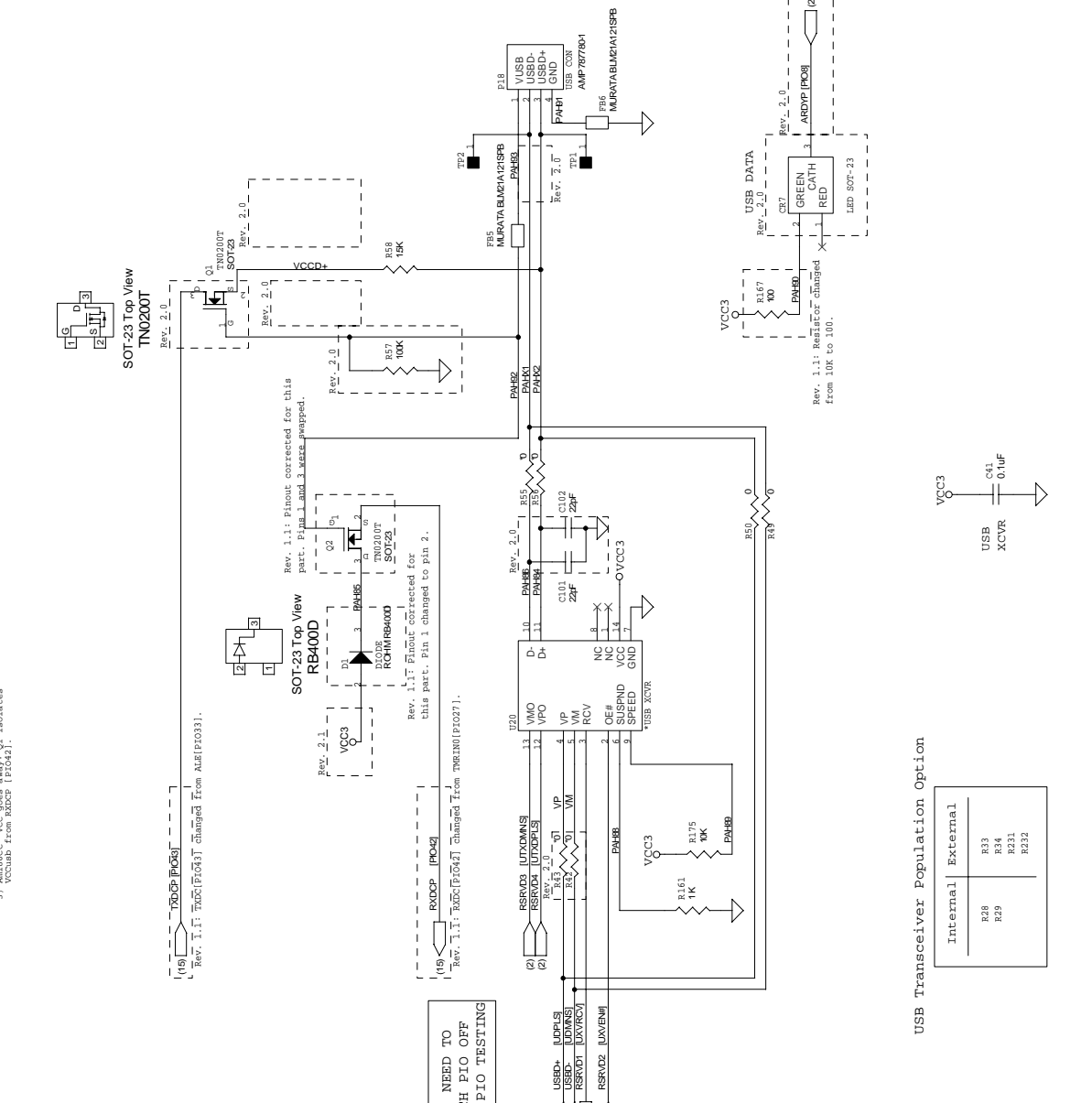
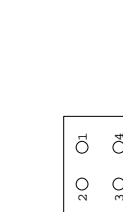
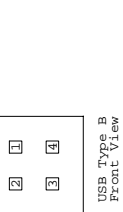
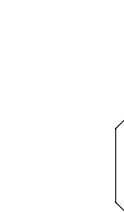
DCE/PCM CLOCK SOURCE

		DCE	
BD CLK SOURCE		TCLK	RCLK
	JPx		
TCLK / PSC	RCLK / CLK	TCLK	RCLK
CDP	CDP	1-2	3-4
CDP	REMOTE	1-2	7-8
REMOTE	CDP	5-6	3-4
REMOTE	REMOTE	5-6	7-8

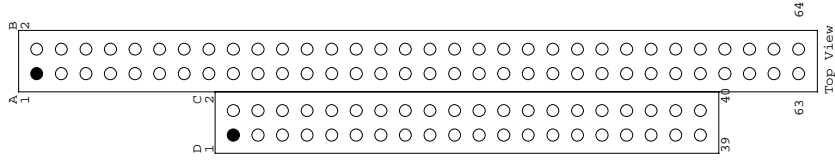
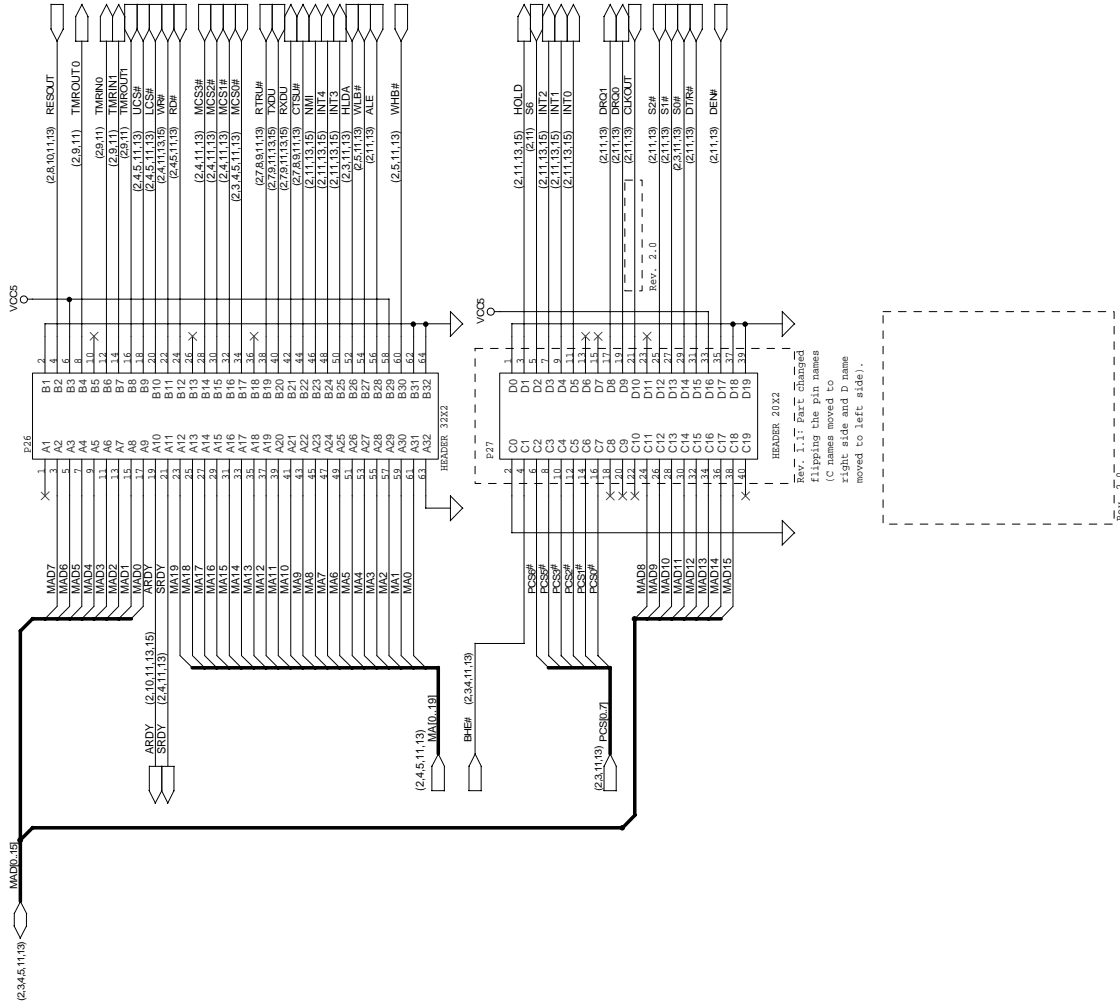
Rev 2.0: Change made to table.

Aml86CC USB Attach/Detach

- Attach: 1) Aml86CC pulls RXCP (P1042) for high edge to determine when VCCub becomes active.
 2) Aml86CC pulls TXCP (P1043) to determine when VCCub becomes inactive.
 3) Aml86CC pulls RXCP (P1042) to determine when VCCub becomes active again.
 Detach: 1) VCCub goes away: Aml86CC pulls RXCP (P1042)
 2) Aml86CC tri-states USBn/D-
 3) VCCUBB from RXCP (P1042).
 Q1 isolates



186 Local Bus Interface



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Design Name: Am186CC Customer Dev. Platform (Main Board) - 186 Local Bus Interface

Size: 186EXP.SCH
Rev: 2.1

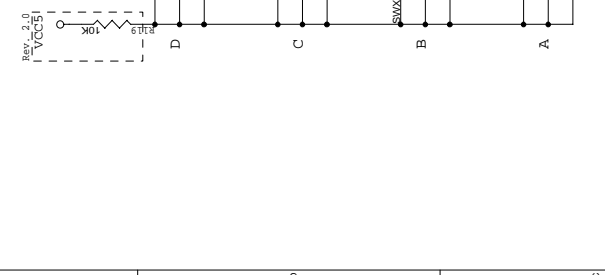
Date: Thursday, February 25, 1999
Sheet: 12 of 15

MULTIDROP SWITCH

Rev. 2.0
VCC5

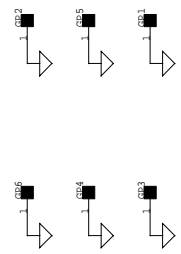
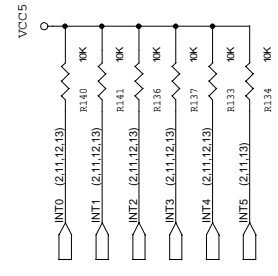
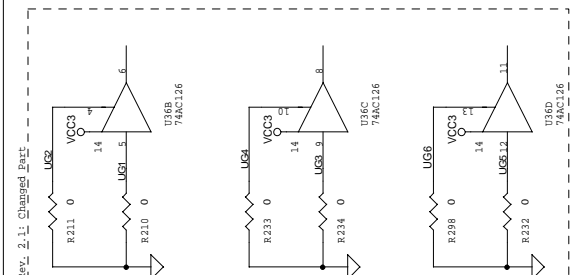
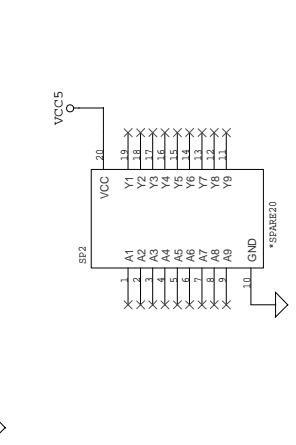
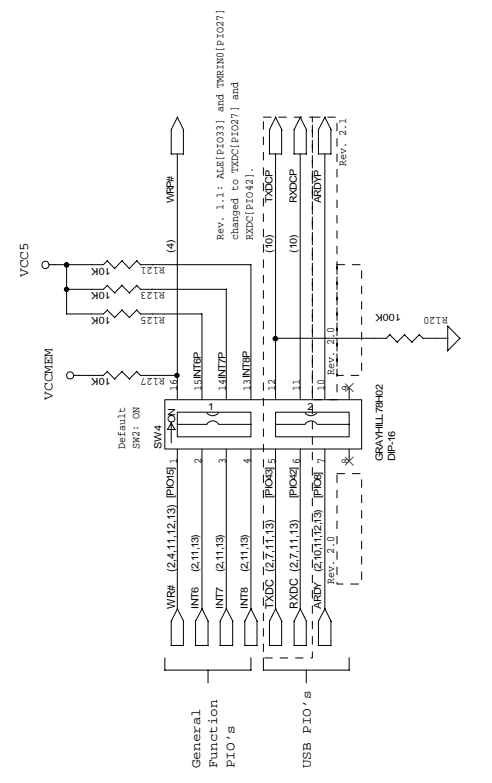
Default
SW1: OFF
SW4: OFF
SW5: OFF
SW6: OFF

NOTE: SET SWITCH ON WHEN USING MULTIDROP MODE (THE RS422 TRANSCEIVERS WILL BE REMOVED IN THIS MODE)



PIO ISOLATION SWITCH

NOTE: TURN SWITCH TO OFF POSITION IF PIO ISOLATION IS DESIRED.



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Design Name
Am180CC Customer Dev. Platform (Main Board) - Miscellaneous
Size
Misc. SCH
Rev
2.1

Date: Thursday, February 25, 1999 Sheet 15 of 15