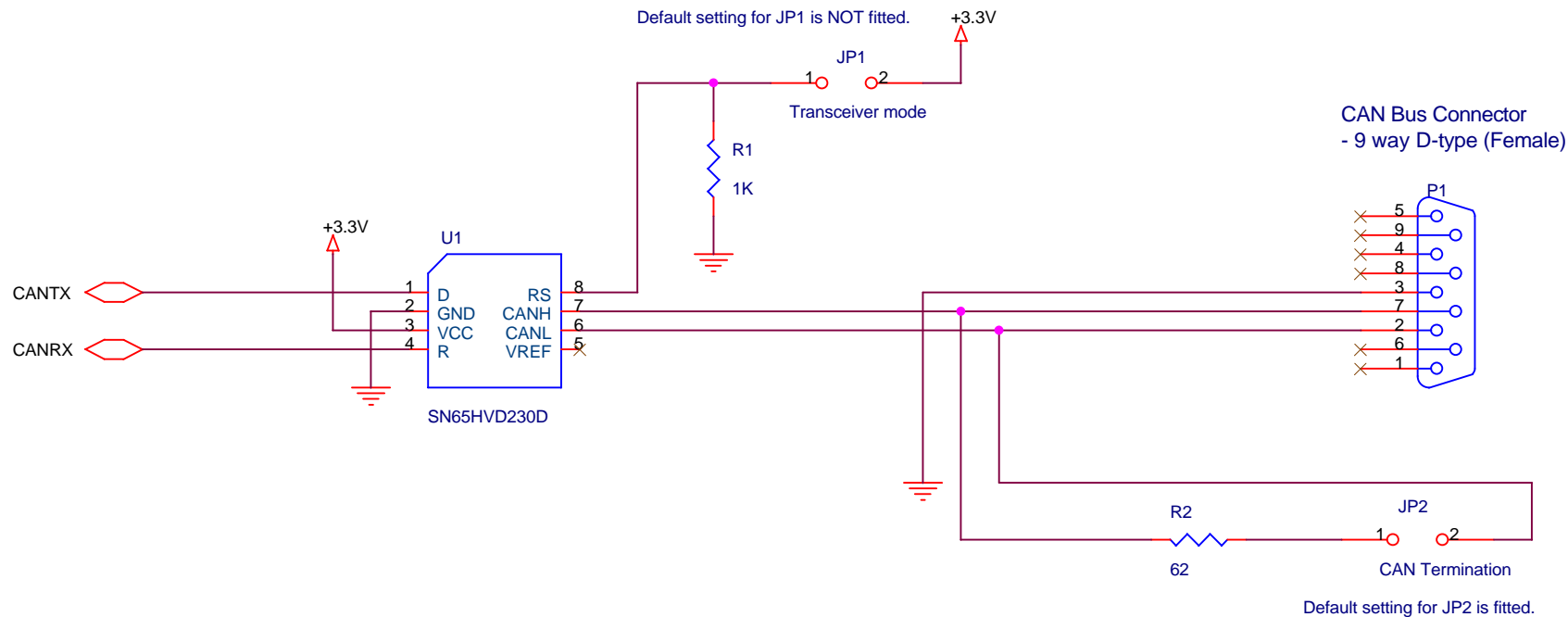
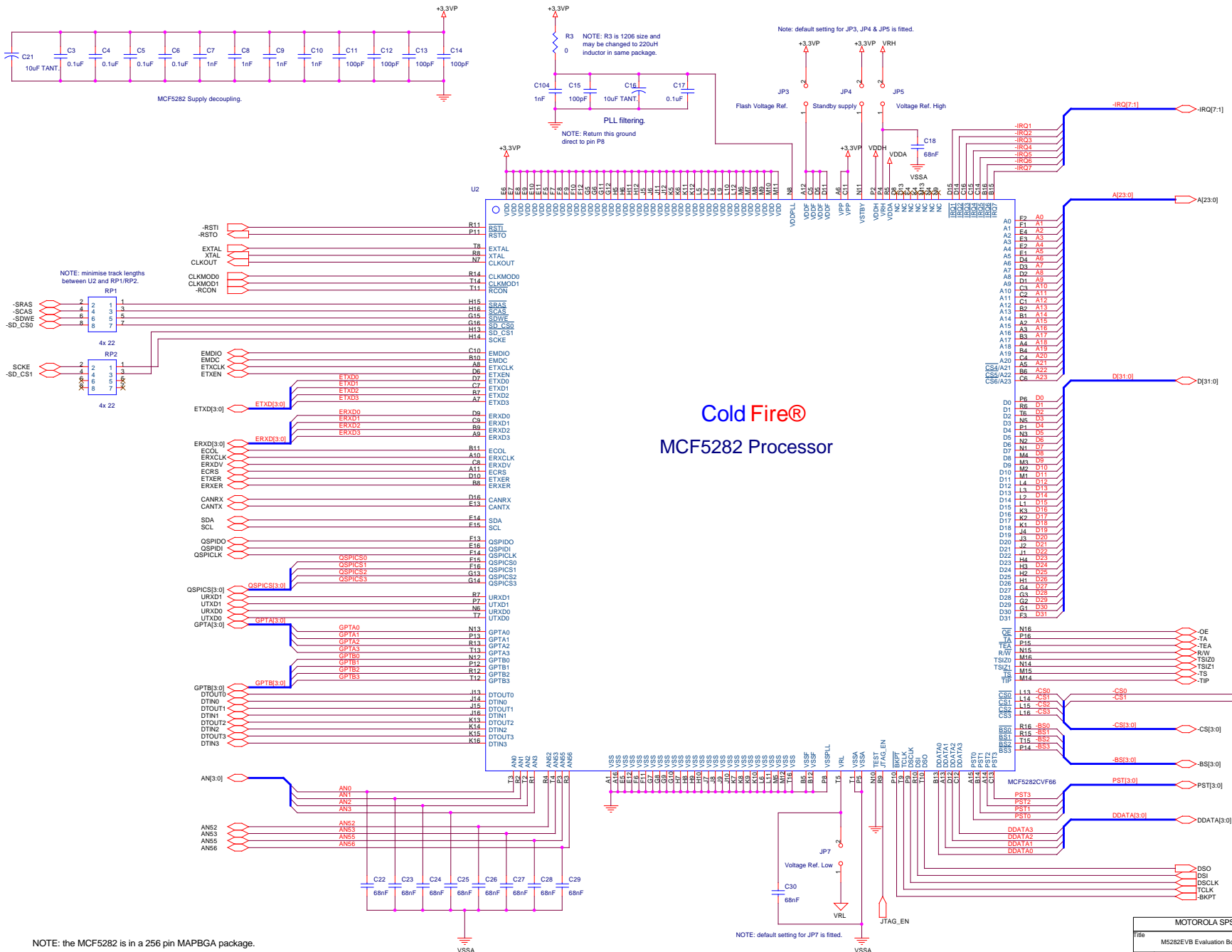


**ColdFire® MCF5282**  
**Evaluation Board - M5282EVb**

Motorola SPS TSPG-TECD ColdFire Group			
Title	M5282EVb Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number	Rev	
C	Hierarchical Overview (Top level)	1.1	
Date	Wednesday, March 26, 2003	Sheet	1 of 13

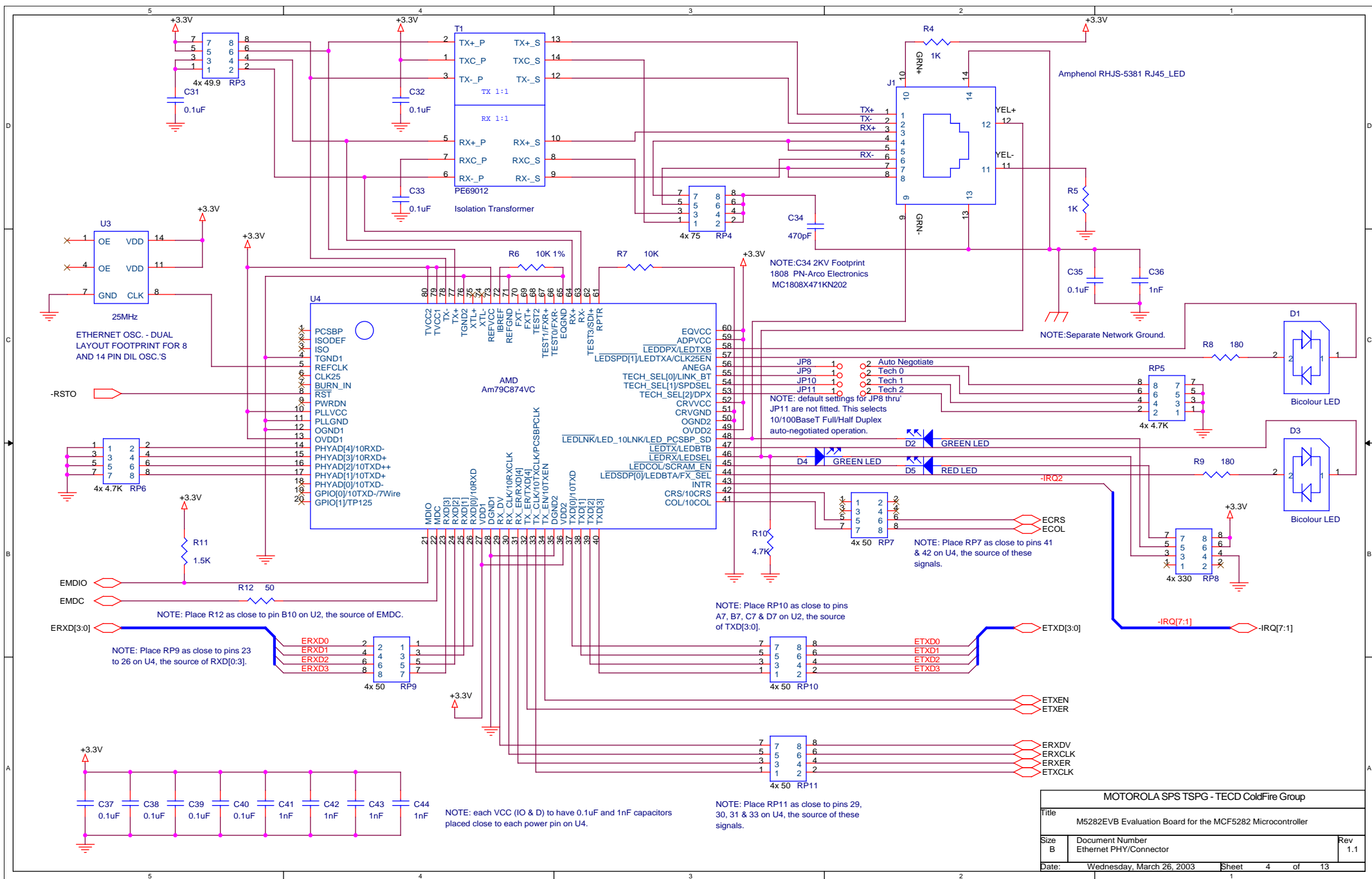


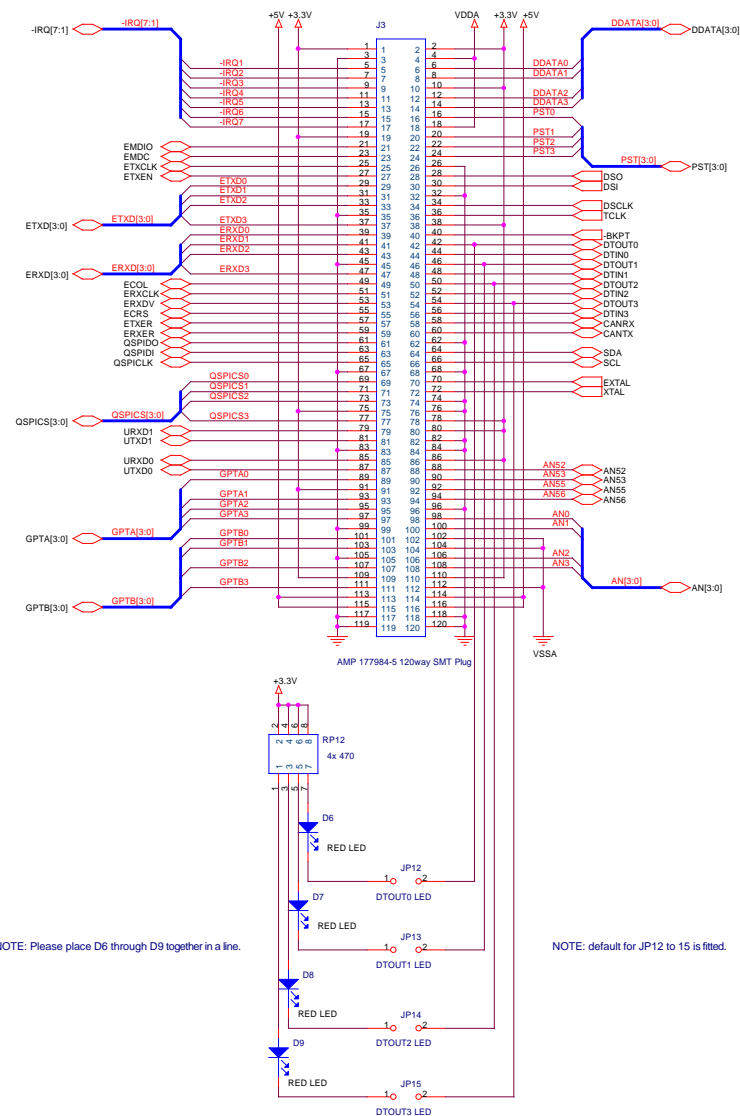
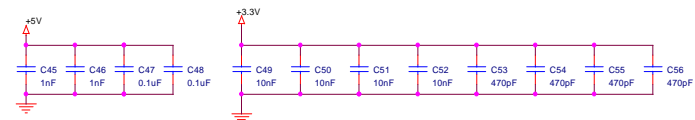
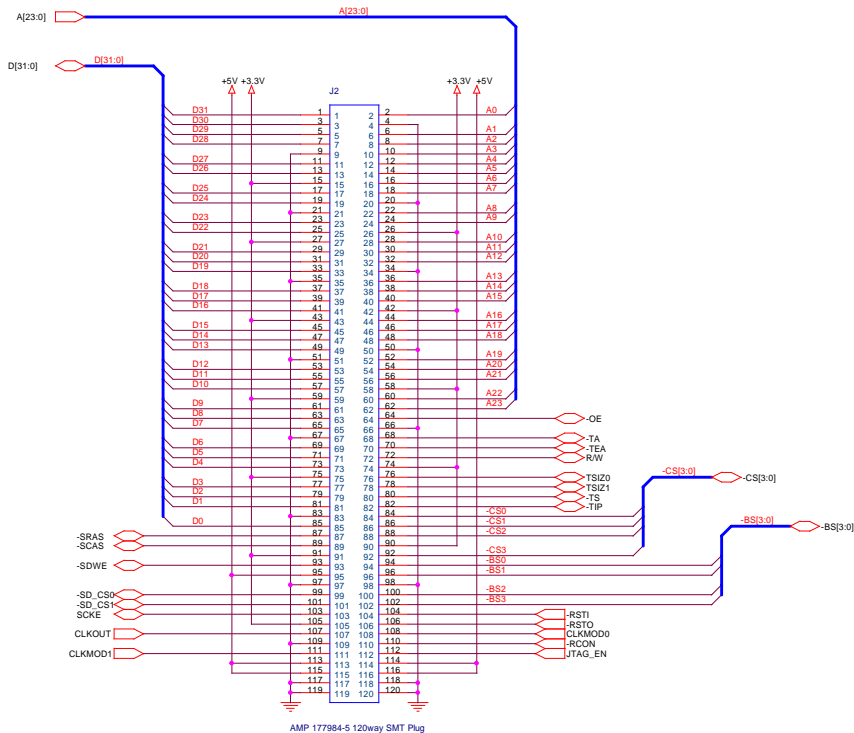
Motorola SPS TSPG -TECD ColdFire Group		
Title		
M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number	Rev
A	CAN Transceiver/Connector	1.1
Date:	Wednesday, March 26, 2003	Sheet 2 of 13



# Cold Fire® MCF5282 Processor

MOTOROLA SPS TSPG - TECO ColdFire Group			
Title	M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number		Rev 1.1
C	MCF5282 MCU		
Date	Wednesday, March 26, 2003	Sheet	3 of 13

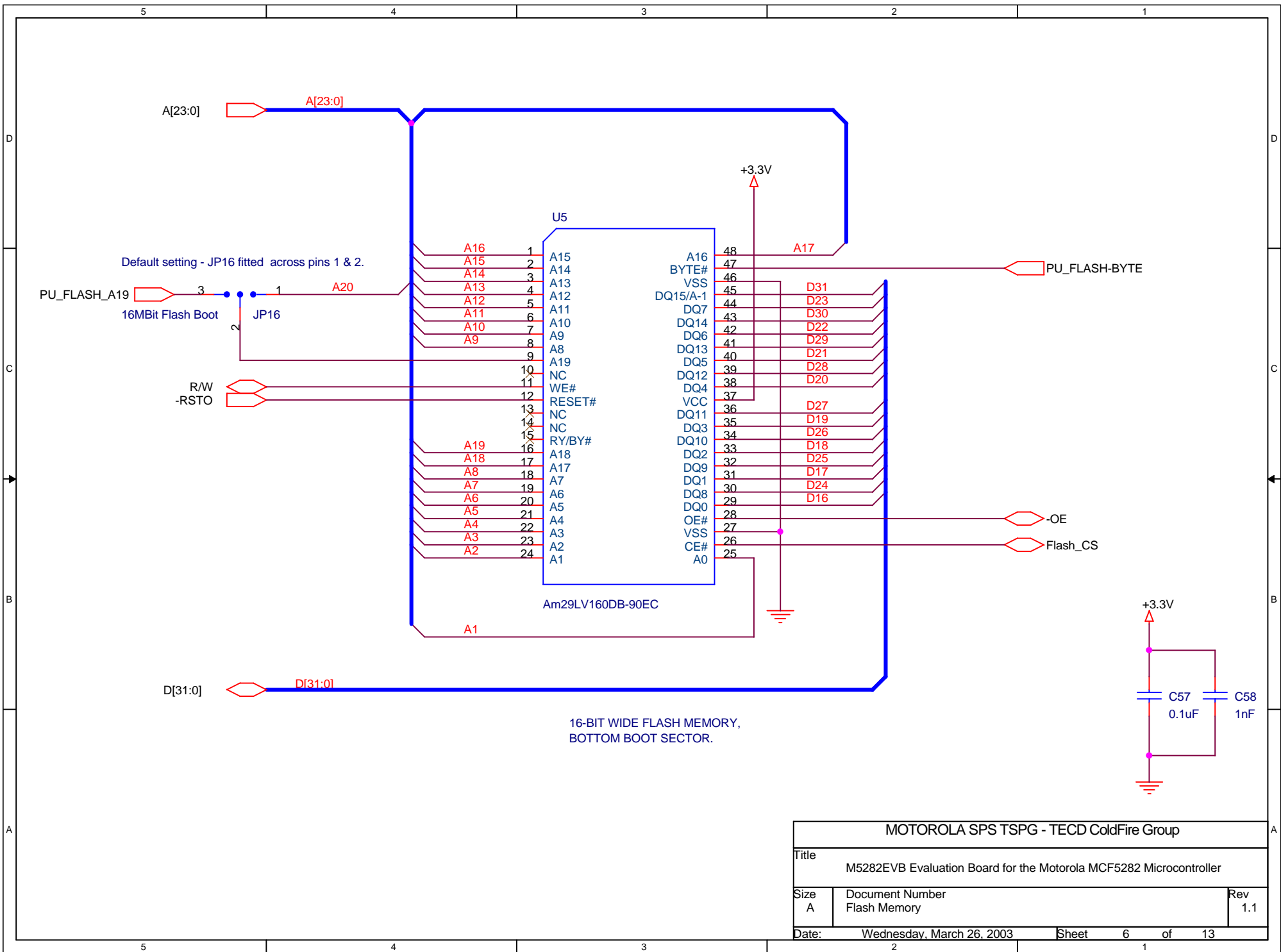




NOTE: Please place D6 through D9 together in a line.

NOTE: default for JP12 to 15 is fitted.

MOTOROLA SPS TSPG -TECD ColdFire Group			
Title	M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number	Rev	
C	Expansion Connectors	1.1	
Date	Wednesday, March 26, 2003	Sheet	5 of 13



# MOTOROLA SPS TSPG - TECD ColdFire Group

Title

M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller

Size  
A

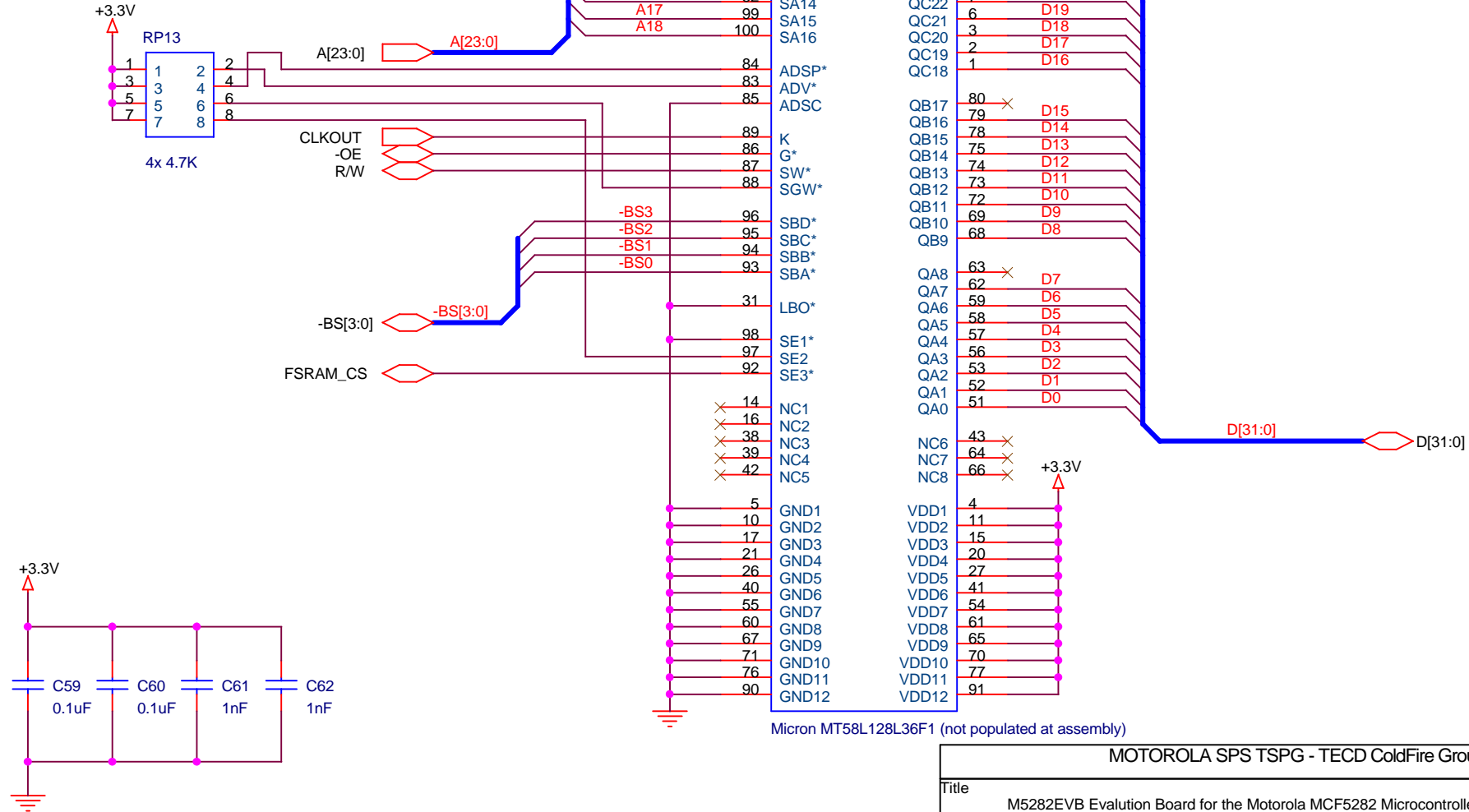
Document Number  
Flash Memory

Rev  
1.1

Date: Wednesday, March 26, 2003

Sheet 6 of 13

NOTE: Alternative FSRAM's with the same PCB footprint and functionality are :- Samsung K7B403625M, Cypress CY7C1345 & IDT 71V3577.



Micron MT58L128L36F1 (not populated at assembly)

MOTOROLA SPS TSPG - TECD ColdFire Group

Title  
M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller

Size A	Document Number Static RAM	Rev 1.1
-----------	-------------------------------	------------

Date: Wednesday, March 26, 2003 Sheet 7 of 13

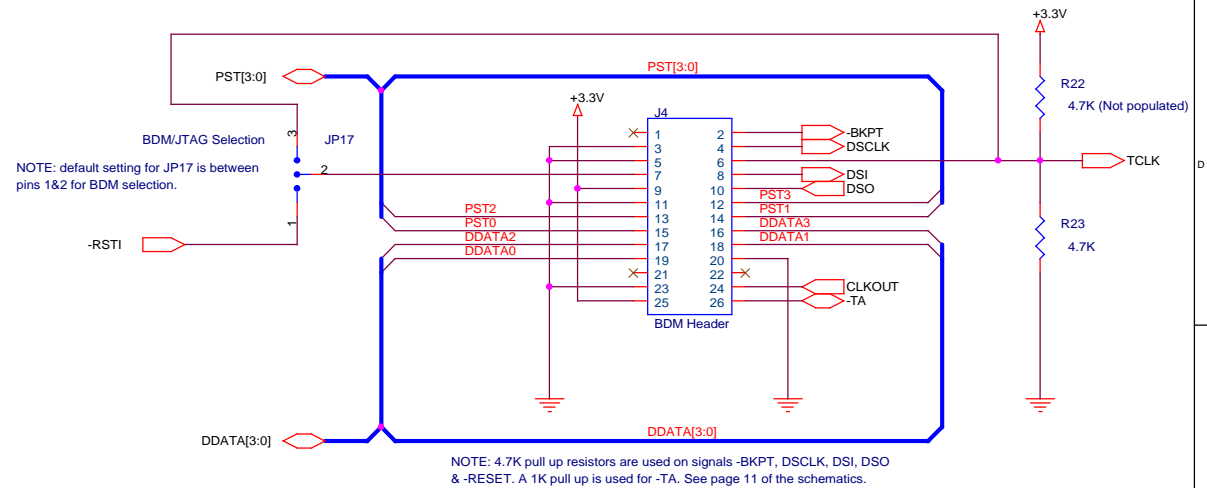
OFF - SW1 - ON			
Chip Config. Off	1	Chip Config. On	
JTAG Interface Enabled	2	BDM Interface Enabled	
Encoded Clock Mode	3	Encoded Clock Mode	
Encoded Clock Mode	4	Encoded Clock Mode	
Encoded Oper. Mode	5	Encoded Oper. Mode	
Encoded Oper. Mode	6	Encoded Oper. Mode	
Encoded Oper. Mode	7	Encoded Oper. Mode	
Encoded Boot Device	8	Encoded Boot Device	
Encoded Boot Device	9	Encoded Boot Device	
Partial Bus Drive	10	Full Bus Drive	
Encoded Address Mode	11	Encoded Address Mode	
Encoded Address Mode	12	Encoded Address Mode	

Encoded Clock Mode			Encoded Operating Mode			
SW1-3	SW1-4	Mode	SW1-5	SW1-6	SW1-7	Mode
OFF	OFF	External Clock - (No PLL)	OFF	X	X	Reserved
OFF	ON	1:1 PLL	ON	OFF	ON	Reserved
ON	OFF	Normal PLL operation (Ext. Clock)	ON	OFF	OFF	Factory Test
ON	ON	Normal PLL operation (Ext. Crystal)	ON	ON	OFF	Single Chip
			ON	ON	ON	Master

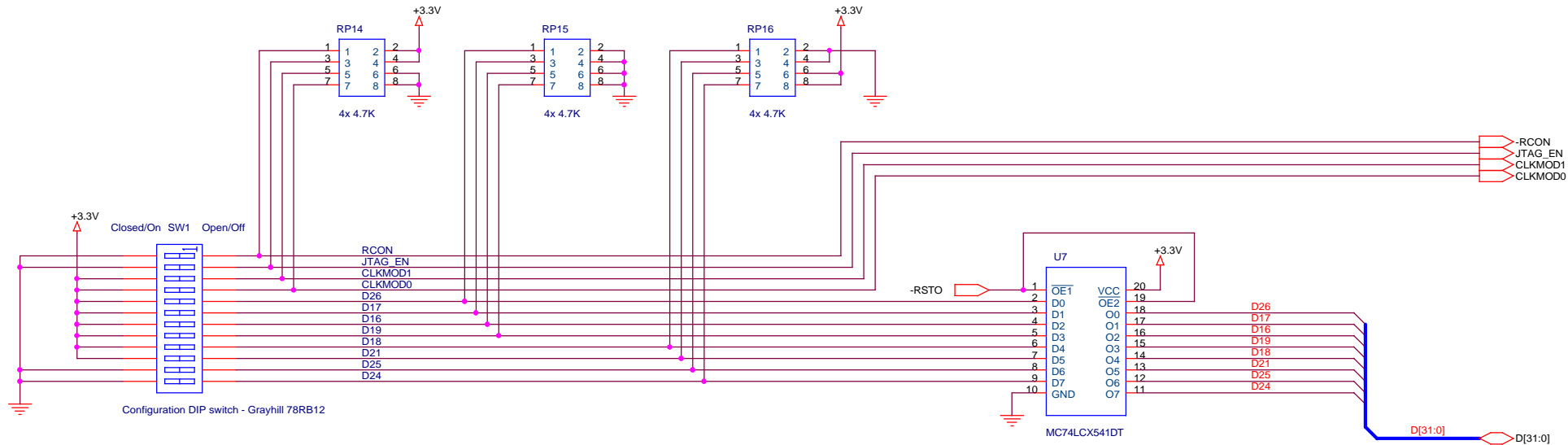
  

Encoded Boot Device (Port Size)			Encoded Address/Chip Select Mode		
SW1-8	SW1-9	Mode	SW1-11	SW1-12	Mode
OFF	OFF	Internal (32-bit)	OFF	OFF	PF[7:5] = -CS[6:4]
OFF	ON	External (16-bit)	OFF	ON	PF7 = -CS6, PF[6:5] = A[22:21]
ON	OFF	External (8-bit)	ON	OFF	PF[7:6] = -CS[6:5], PF[5] = A21
ON	ON	External (32-bit)	ON	ON	PF[7:5] = A[23:21]

NOTE: Please place these tables on the silkscreen on the topside of the PCB close to SW1.



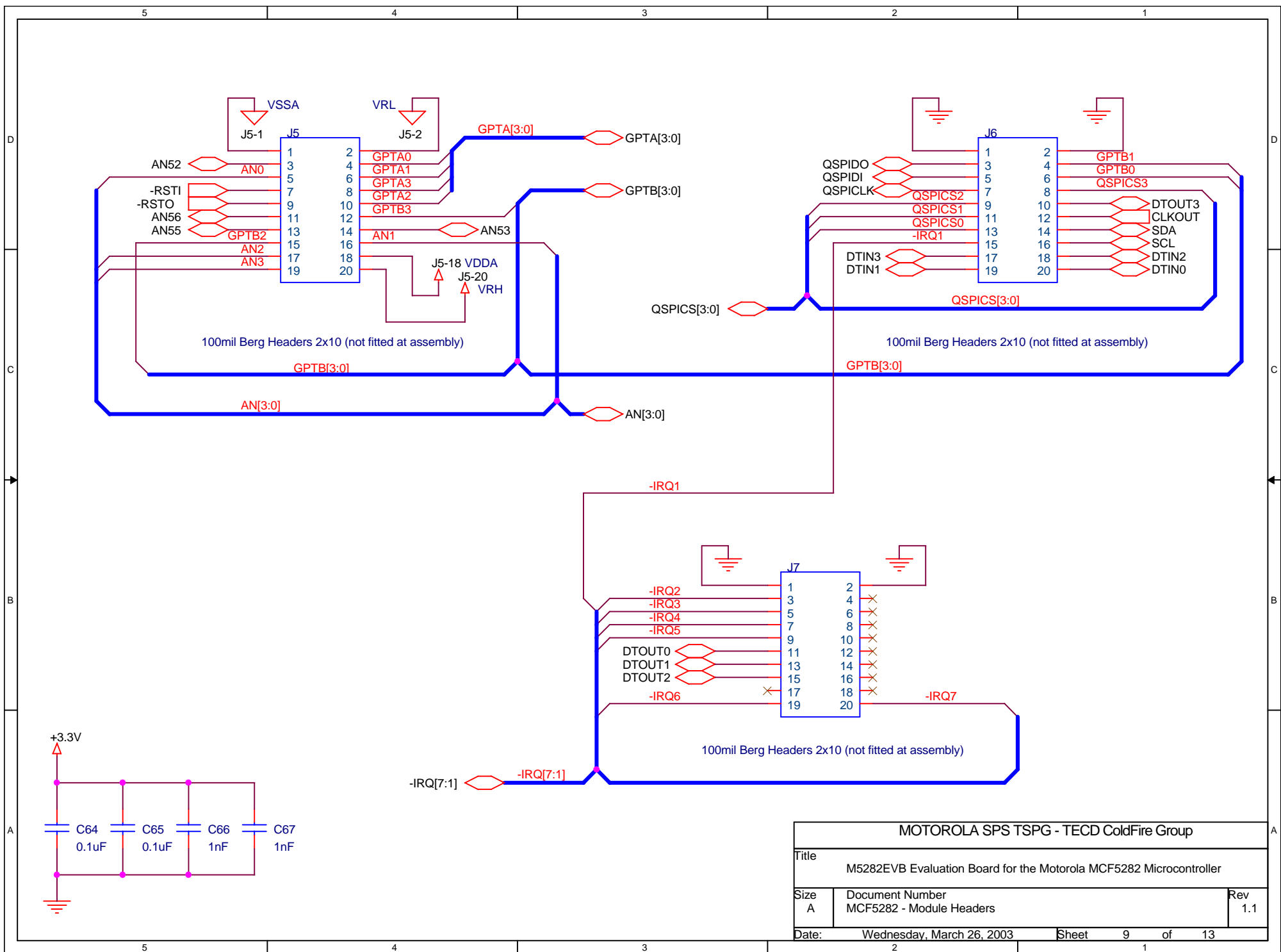
**IMPORTANT NOTE: ONLY a 3.3V BDM debugging cable can be used with the MCF5282 processor.**



**IMPORTANT NOTE: THE -RSTO SIGNAL MUST BE USED TO DRIVE THE OUTPUT ENABLE PINS OF U7 TO ALLOW THE D16, D17, D18, D19, D21, D24, D25 & D26 SIGNALS TO BE LATCHED CORRECTLY BY THE MCF5282 FOR CONFIGURATION AT RESET.**

MOTOROLA SPS TSPG - TECD ColdFire Group		
Title	M5282EVb Evaluation Board for the Motorola MCF5282 Microcontroller	
Size	Document Number	Rev
B	BDM/JTAG Header and Chip Configuration.	1.1
Date:	Wednesday, March 26, 2003	Sheet 8 of 13





MOTOROLA SPS TSPG - TECD ColdFire Group		
Title		
M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number	
	MCF5282 - Module Headers	
Date:		Rev
Wednesday, March 26, 2003		1.1
Sheet		of
9		13

DC voltage input range +7 to +14V

Power Jack Connector -  
P2 2.1mm diameter

Switchcraft RAPC712  
2-way Bare Wire  
Power Connector

Augat 25V-02

POWER SW SLIDE-SPST(Board Edge)

SA Fast blow

MBRS340T3

C71 0.1uF

C72 1nF

C73 1000uF

C74 330uF

C75 0.1uF

C76 10nF

C77 4.7uF

C78 0.1uF

C79 1nF

C80 0.1uF

C81 10nF

C82 10pF

C83 10pF

C84 10pF

C85 10pF

C86 10pF

C87 10pF

C88 330uF

C89 0.1uF

C90 0.1uF

C91 0.1uF

C92 0.1uF

C93 0.1uF

C94 0.1uF

C95 0.1uF

C96 0.1uF

C97 0.1uF

C98 0.1uF

C99 0.1uF

C100 0.1uF

C101 0.1uF

C102 0.1uF

C103 0.1uF

C104 0.1uF

C105 0.1uF

C106 0.1uF

C107 0.1uF

C108 0.1uF

C109 0.1uF

C110 0.1uF

C111 0.1uF

C112 0.1uF

C113 0.1uF

C114 0.1uF

C115 0.1uF

C116 0.1uF

C117 0.1uF

C118 0.1uF

C119 0.1uF

C120 0.1uF

C121 0.1uF

C122 0.1uF

C123 0.1uF

C124 0.1uF

C125 0.1uF

C126 0.1uF

C127 0.1uF

C128 0.1uF

C129 0.1uF

C130 0.1uF

C131 0.1uF

C132 0.1uF

C133 0.1uF

C134 0.1uF

C135 0.1uF

3.3V Regulator

U8 LM2596S-3.3

VIN -ON/OFF

VOUT

FB

ADJ

SW1

SW2

SW3

SW4

SW5

SW6

SW7

SW8

SW9

SW10

SW11

SW12

SW13

SW14

SW15

SW16

SW17

SW18

SW19

SW20

SW21

SW22

SW23

SW24

SW25

SW26

SW27

SW28

SW29

SW30

SW31

SW32

SW33

SW34

SW35

SW36

SW37

SW38

SW39

SW40

SW41

SW42

SW43

SW44

SW45

SW46

SW47

SW48

SW49

SW50

SW51

SW52

SW53

SW54

SW55

SW56

SW57

SW58

SW59

SW60

SW61

SW62

SW63

SW64

SW65

SW66

SW67

SW68

SW69

SW70

SW71

SW72

SW73

SW74

SW75

SW76

SW77

SW78

SW79

SW80

SW81

SW82

SW83

SW84

SW85

SW86

SW87

SW88

SW89

SW90

SW91

SW92

SW93

SW94

SW95

SW96

SW97

SW98

SW99

SW100

SW101

SW102

SW103

SW104

SW105

SW106

SW107

SW108

SW109

SW110

SW111

SW112

SW113

SW114

SW115

SW116

SW117

SW118

SW119

SW120

SW121

SW122

SW123

SW124

SW125

SW126

SW127

SW128

SW129

SW130

SW131

SW132

SW133

SW134

SW135

SW136

SW137

SW138

SW139

SW140

SW141

SW142

SW143

SW144

SW145

SW146

SW147

SW148

SW149

SW150

SW151

SW152

SW153

SW154

SW155

SW156

SW157

SW158

SW159

SW160

SW161

SW162

SW163

SW164

SW165

SW166

SW167

SW168

SW169

SW170

SW171

SW172

SW173

SW174

SW175

SW176

SW177

SW178

SW179

SW180

SW181

SW182

SW183

SW184

SW185

SW186

SW187

SW188

SW189

SW190

SW191

SW192

SW193

SW194

SW195

SW196

SW197

SW198

SW199

SW200

SW201

SW202

SW203

SW204

SW205

SW206

SW207

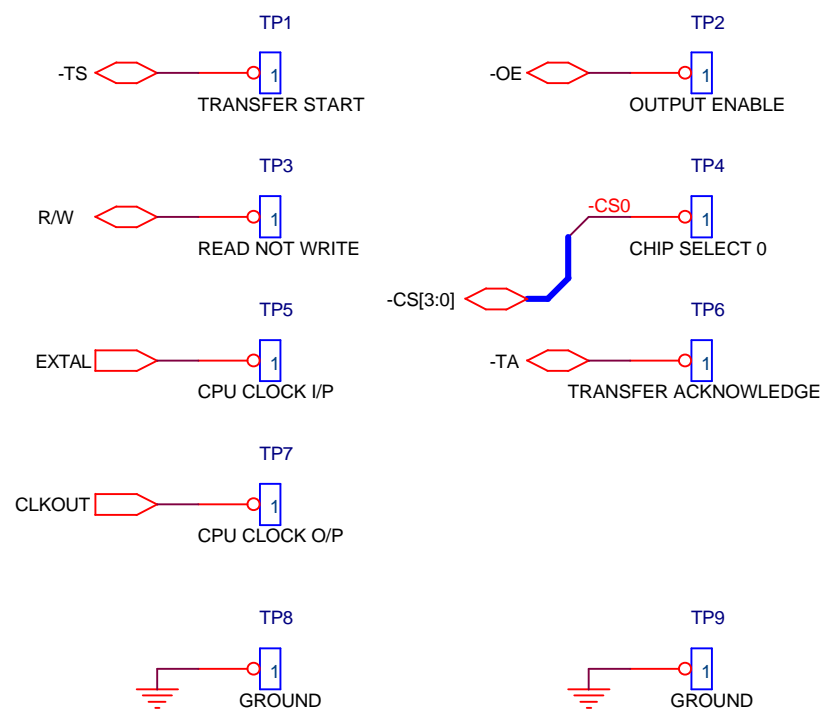
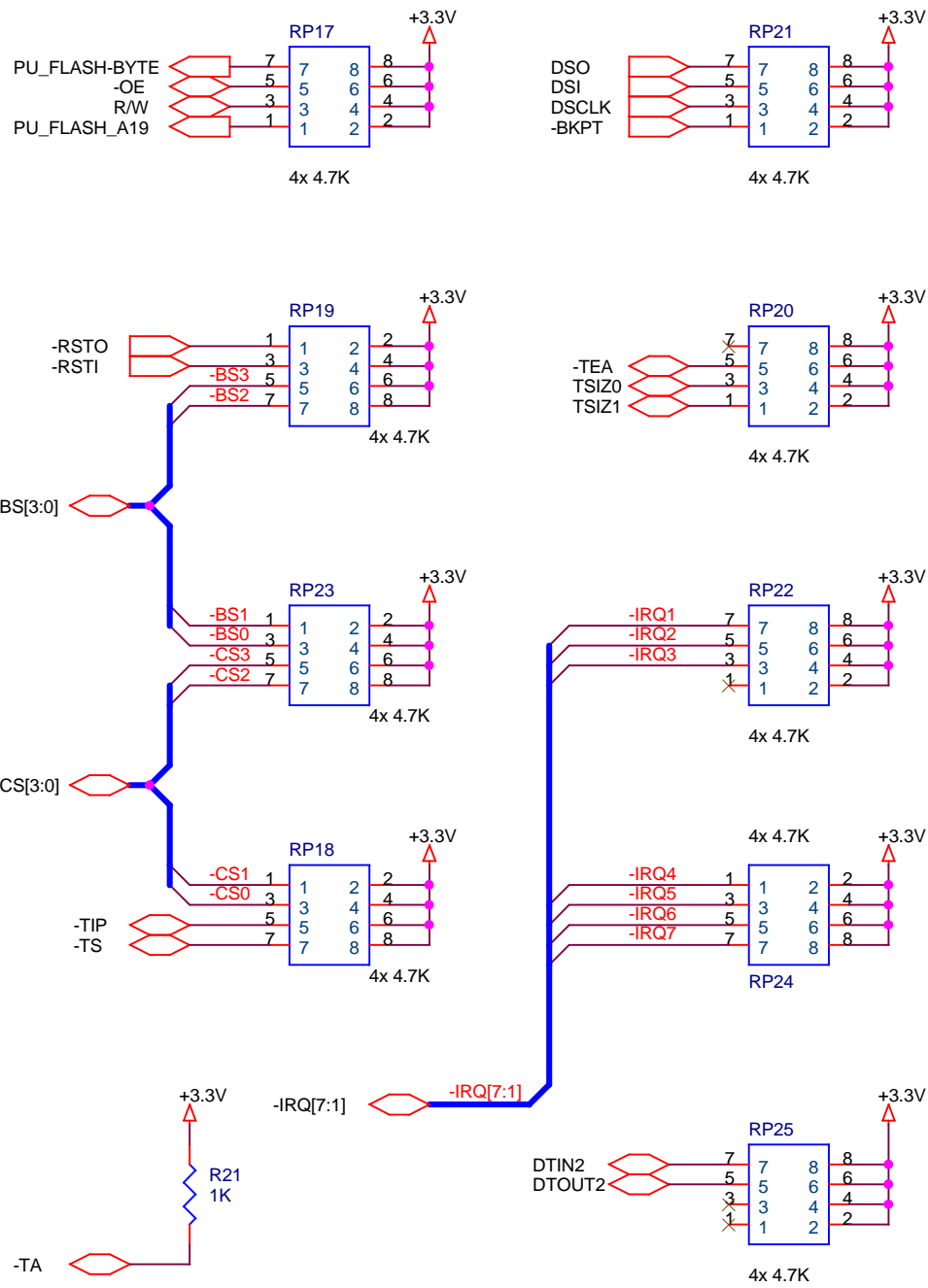
SW208

SW209

SW210

SW211

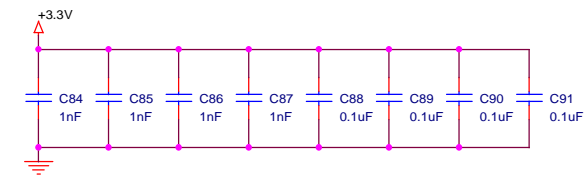
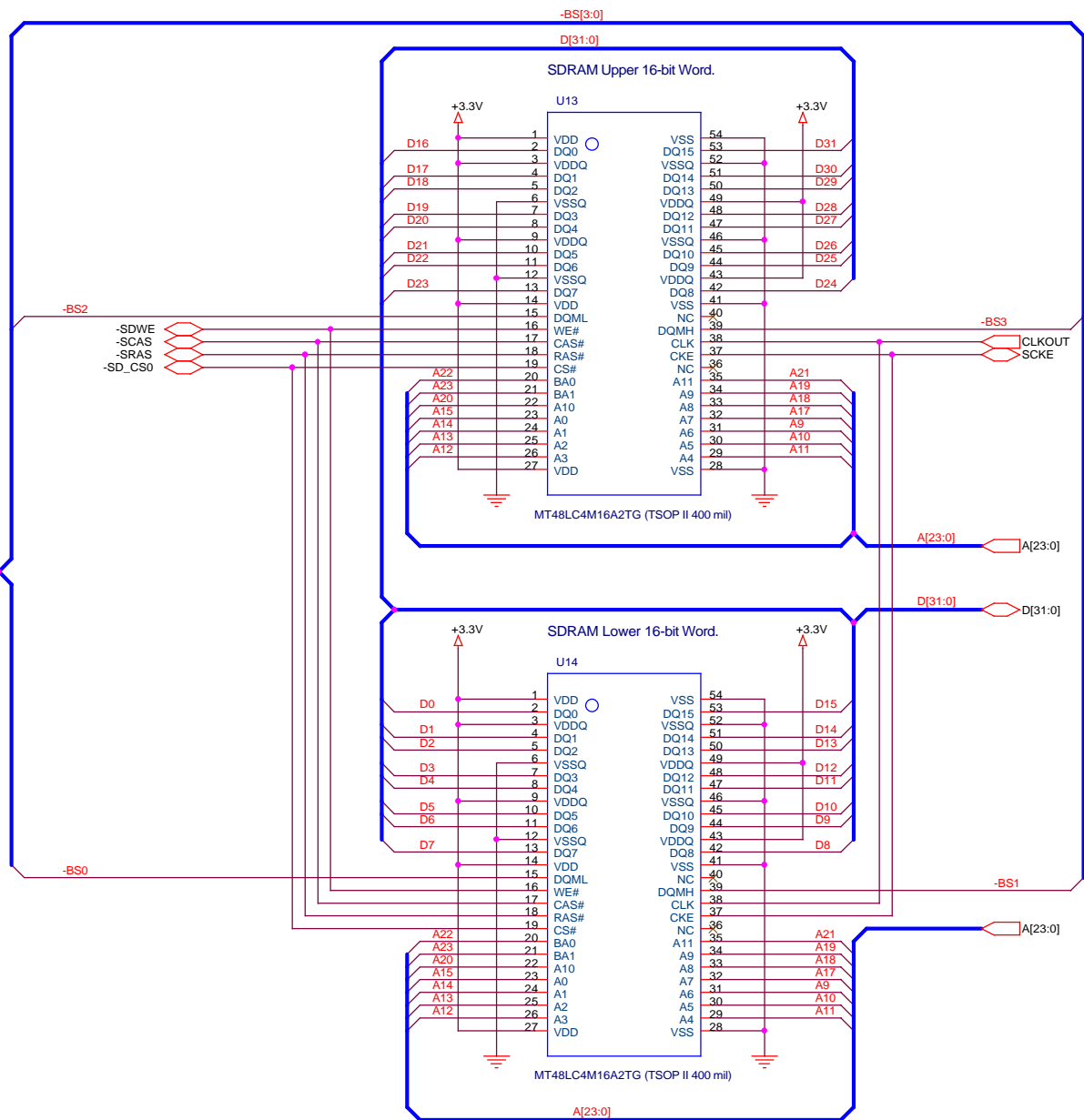
SW212



NOTE: Place TP8 & TP9 at the corners of the PCB to allow easy connection of 'scope probe ground leads.

Important Note - all unconnected pull-up and pull-down resistor pack connections, on all schematics pages, need to be connected to an unmasked via.

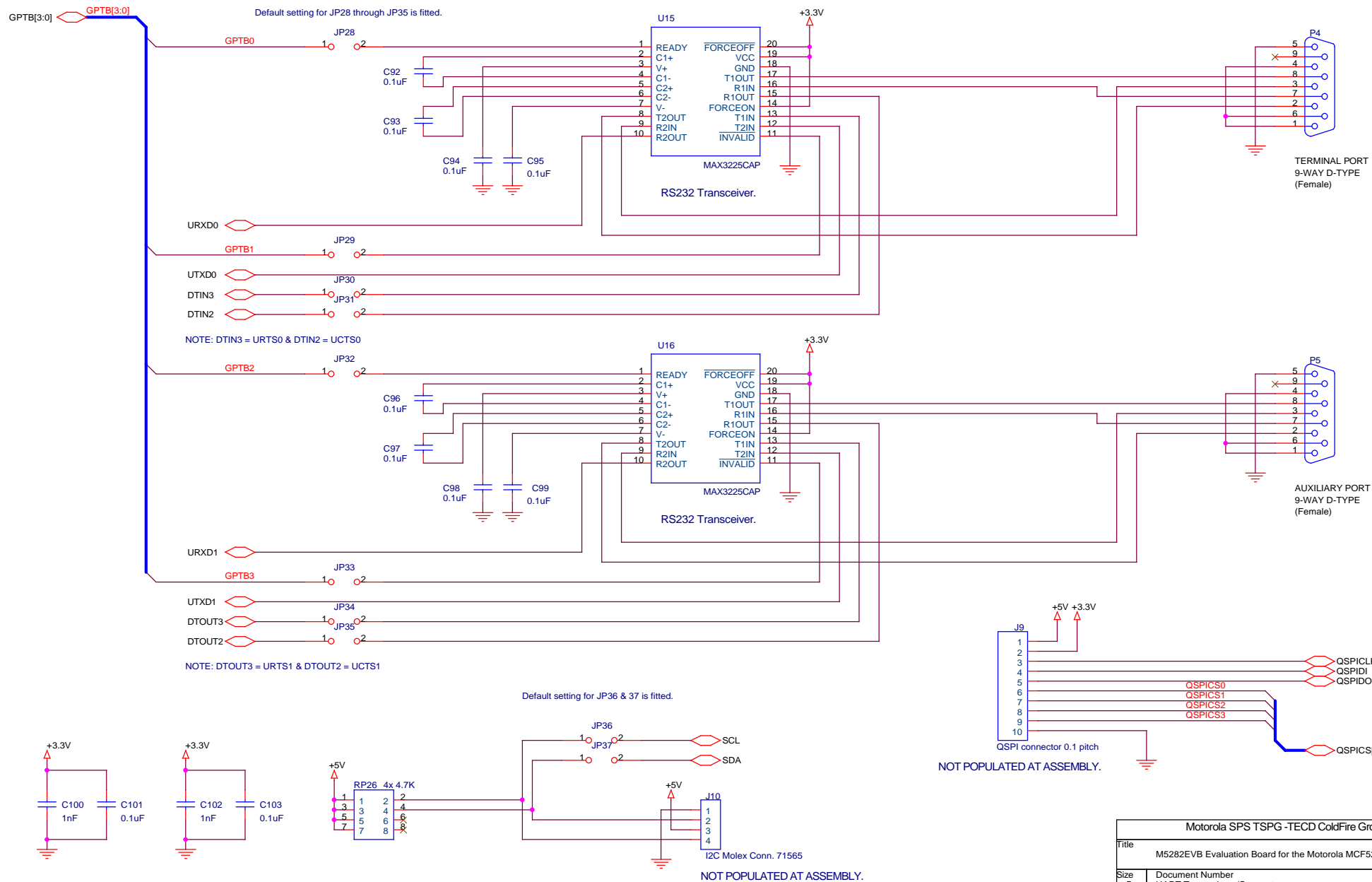
MOTORLA SPS TSPG -TECD ColdFire Group		
Title		
M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller		
Size	Document Number	Rev
A	Pull-ups and Test Points.	1.1
Date:	Wednesday, March 26, 2003	Sheet 11 of 13



NOTE: Alternative SDRAM's with the same PCB footprint are :

- Samsung K4S641632E
- Hyundai HY57V641620HG
- Toshiba TC59S6416CFT
- Infineon HYB39S64160ET
- Winbond W986416DH

MOTOROLA SPS TSPG - TECDC ColdFire Group			
Title		M5282EVB Evaluation Board for the Motorola MCF5282 Microcontroller	
Size	Document Number		Rev
B	Synchronous DRAM		1.1
Date:	Wednesday, March 26, 2003	Sheet	12 of 13



Motorola SPS TSPG -TECD ColdFire Group		
Title	M5282EVb Evaluation Board for the Motorola MCF5282 Microcontroller	
Size B	Document Number	Rev
	UART Transceivers/Connectors	1.1
Date:	Tuesday, April 15, 2003	Sheet 13 of 13