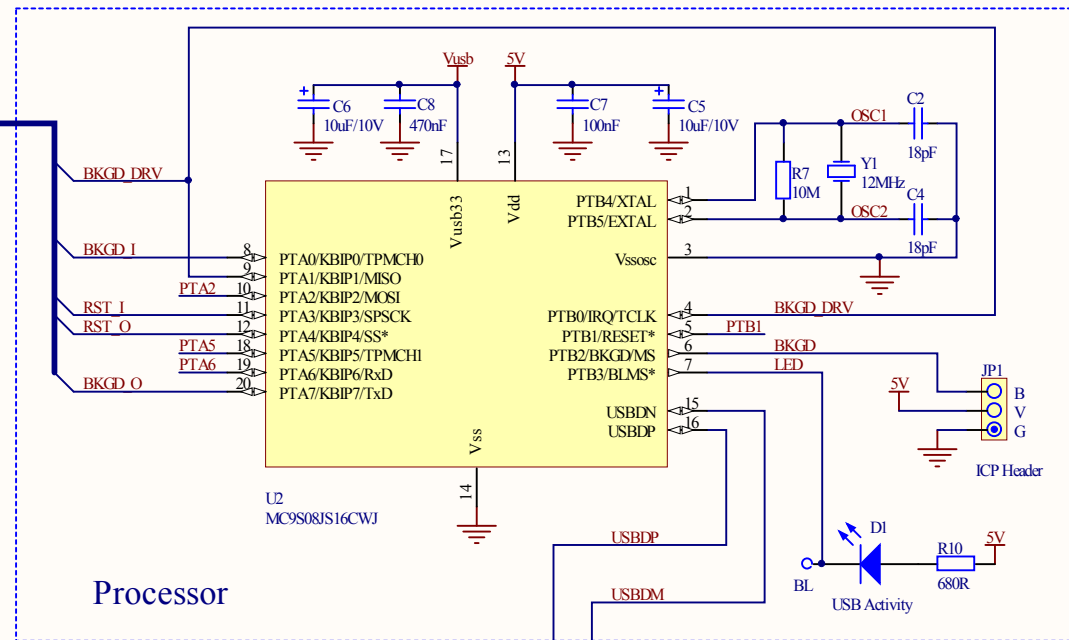
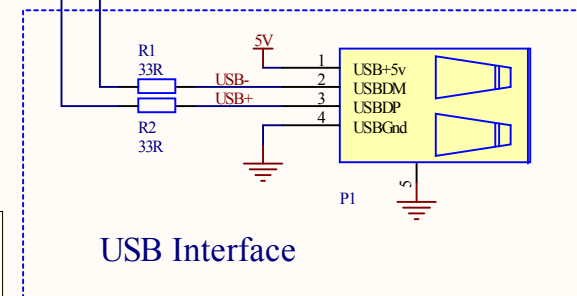


BDM Interface



Processor



USB Interface

Revision:  
1.0 1st Release

## Notes:

BL - Tie to ground to force ROM Boot Loader Mode. Only for initial program load.  
ICP Header - BDM interface used for debugging firmware. May be omitted.  
Z1 - Protection device - may be omitted

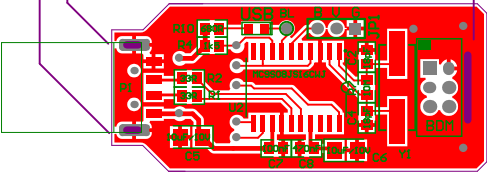
This version only supports HCS12, HCS08, & CFV1.  
It does not support RS08 or CFV2,3,4 devices  
It does not supply target power.

Title USBDM_SOIC20_JS16(Minimal)		
Size A4	Number	Revision 1.0
Date: 21/10/2009	Sheet of	
File: C:\Peter\USBDM_JS16_SOIC20\Minimal\SchDown By:		

1mm plated slot

Board Outline this layer

1mm slot

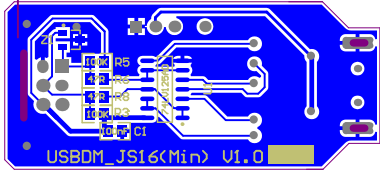


USBDM\_JS16\_SOIC20[Minimal].PcbDoc

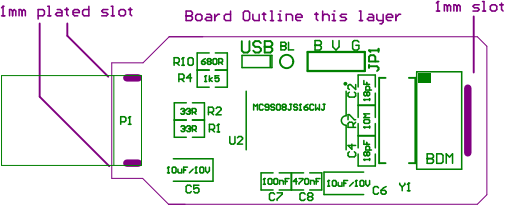
1mm slot

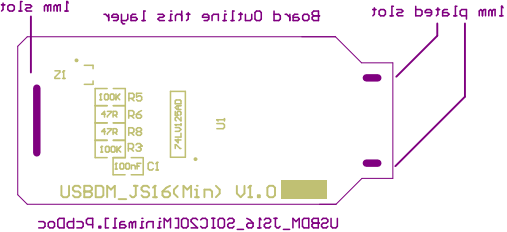
Board Outline this layer

1mm plated slot



USBDM\_1216\_201C50(Minimal).PcbDoc





# Bill of Materials

USBDM\_SOIC20\_JS16(Minimal)

Source Data From:

USBDM\_JS16\_SOIC20[Minimal].PRJPCB

Project:

USBDM\_JS16\_SOIC20[Minimal].PRJPCB

Variant:

None

Creation Date:	21/10/2009	6:20:36 PM
Print Date:	21-Oct-09	6:20:38 PM

Footprint	Comment	Farnell PN	#Column Name Error:Dig	Designator	Description	Quantity
CCNP2012-0805	100nF	8820120		C1, C7	Capacitor SMT	2
CCNP2012-0805	18pF	1414673		C2, C4	Capacitor SMT	2
TC3528-1411	10uF/10V	9527745		C5, C6	Capacitor Polarized (SMT - Case A)	2
CCNP2012-0805	470nF	1288279		C8	Capacitor SMT	1
LED-SMT-2	LED Green	5790852		D1	LED (Green SMT)	1
USB_TypeA M - SMT2	USB_CONNECTOR	1308875		P1	USB Connector	1
HDR2X3	Transition 3x2	1188909		P2	2x3 Transition or male header	1
CR2012-0805	33R	1631399		R1, R2	Resistor SMT	2
CR2012-0805	100K	9332405		R3, R5	Resistor SMT	2
CR2012-0805	1k5	1632464		R4	Resistor SMT	1
CR2012-0805	47R	1632490		R6, R8	Resistor SMT	2
CR2012-0805	10M	9236392		R7	Resistor SMT	1
CR2012-0805	680R	9334785		R10	Resistor SMT	1
SO-14_L	74LV125AD	9592504		U1	Quad 3-state Buffer	1
SO-G20	MC9S08JS16CWJ	1704517		U2	Microcontroller with USB	1
XTAL_SMT	12MHz	1652551		Y1	Crystal (Low profile SMT)	1
SOT23	PESD5V0S2UAT	8737738		Z1	Dual Unipolar Protection Device (5V)	1
						23

Approved	Notes