## How to use BDM Pod with HyperTerm

The procedures are for WinXP. May differ with different OS.

1. Start - Programs - Accessories - Communications - HyperTerminal

Connection Description	? ×
New Connection	
Enter a name and choose an icon for the connection:	
Name:	
1	
lcon:	
	2
OK Car	icel

Give it a name.



Select COM Port

Connect To	×
Enter details for the phone number that you want to dial:	
Country/region: Canada (1)	1
Area code: 416	
Phone number:	1
Connect using: COM1	1
OK Cancel	

## Select the BAUD options

COM	1 Properties			? ×
Po	rt Settings			
	'			
	Bits per second:	9600		•
	Data bits:	8		•
	Parity:	None		•
	Stop bits:	1		•
	Flow control:	Xon / Xo	off	
			Restore	Defaults
	0	ĸ	Cancel	Apply

After the setup.

🏶 BDMPod - HyperTermin	al							
File Edit View Call Trans	sfer Help							
D 🖻 🍙 🥈 🖻 🔁								
Connected 0:00:15 Au	uto detect	Auto detect	SCROLL	CAPS	NUM	Capture	Print echo	

Connecting to a Target

BDMPod - HyperTerminal File Edit View Call Transfer Help							<u>_                                    </u>
D-Bug12 4.0.0b18 Copyright 1996 - 200 For Commands type "H	)2 Motoro] lelp"	la Semi	cond	uctor	<u> </u>		<u>*</u>
Can't Communicate Wi 1.) Set Target Speed 2.) Reset Target 3.) Reattempt Commun 4.) Erase & Unsecure 5.) Enter BDM debugg ?	th Targe (8000 Kh nication ger	t CPU Hz)					
Connected 0:02:58 Auto detect	9600 8-N-1	SCROLL	CAPS	NUM	Capture	Print echo	

Choose *1* to set Target's frequency.



Press CR several times for Target to sync up with BDM Pod so S> or R> will appear.



Check *Device* type of Target to make sure that is the actual *device* you are working with.



To erase Flash type FBULK.

🏶 BDMPod - HyperTerm	inal							_ 0	×
File Edit View Call Tr	ansfer Help								
	3								
Enter Target	Crystal	Frequenc	y (kHz)	): 16	5000				
Can't Commun	icate Wi	th Target	CPU						
1.) Set Targ 2.) Reset Ta 3.) Reattemp 4.) Erase & 5.) Enter BD ? S>device	et Speed rget t Commun Unsecure M debugg	l (16000 k nication ner	(Hz)						
Device: DP25 EEPROM: \$000 Flash: \$8000 RAM: \$1000 - I/O Regs: \$0 Target Speed S>fbulk_	6, MC9S1 0 - \$0FF - \$BFFF \$3FFF 000 - \$0 : 16000	2DP256, M F Pages: 3FF KHz	1C9S12D1 16 PPf	T256, NGE a	, MCS at: 4	9812DJ: 0030	256, N	4095121	
Connected 0:09:37	Auto detect	9600 8-N-1	SCROLL	CAPS	NUM	Capture	Print ech	10	

To Program Flash type FLOAD.



BDM Pod is waiting for the File to be uploaded. Send file as text

🏀 BDMPod - HyperTerminal	
File Edit View Call Transfer Help	
D 2 m 3 m Send File Receive File	
Can't Comm <sub>Capture Text</sub> Target CPU	<b>_</b>
1.) Set Tai 2.) Reset Capture to Printer	
[3.] Reattempt Communication	
4.) Erase & Unsecure 5.) Enter BDM debugger 2	
\$>device	
Device: DP256, MC9S12DP256, MC9S12DT256, MC9S12DJ256, EEPROM: \$0000 - \$0FFF Elash: \$8000 - \$BEFF Pages: 16 PPAGE at: \$0030	MC9S12D
RAM: \$1000 - \$3FFF	
I/O Regs: \$0000 - \$03FF	
Target Speed: 16000 KHz	
S>fbulk	
S>tload	
Sends a text file to the remote system	

Send Text File				<u>? ×</u>
Look in:	C V101		-	G 🖻 🖻 🖽 -
My Recent Documents Desktop My Documents My Computer	AUDIO.ASM AUDIO.DBG AUDIO.LST AUDIO.0 DEFAULT.ENV DEFAULT.ENV EDP256Regs.INC ERR.TXT INT.ASM INT.ASM INT.LST INT.0 MAIN.ASM MAIN.ASM MAIN.DBG MAIN.LST MAIN.OBG	out.s19     PROJECT.INI     Robot.PRM     Robotics.abs     Robotics.S19     Roving.asm     Roving.DBG     Roving.DBG     Roving.0     SFR04.ASM     SFR04.LST     SFR04.o     SFR04.o     SREC	SREC.BAT SRECCVT. A) STATES.A STATES.D STATES.L STATES.o V101.zip	EXE SM BG ST Type: list file Date Modified: 11/2/2003 7:43 PM Size: 67.8 KB
My Network Places	File name:	out.s19 All files (*.*)		Open     Cancel

Locate File to be uploaded and double click on that file to initiate upload.

The characters \*\*\* shows the File being uploaded

🏀 BDMPod - HyperTern	ninal							
File Edit View Call Tr	ansfer Help							
	9 🖻							
Can't Commun	icate Wi	th Targe	t CPU					<b>_</b>
1.) Set Targ	et Speed	(16000	(Hz)					
3.) Reattemp	t Commun	ication						
4.) Erase &	Unsecure	2						
5.) Enter BD	M debugg	ier						
?								
\$>device								
Device: DP25 EEPROM: \$000 Flash: \$8000 RAM: \$1000 - I/O Regs: \$0 Target Speed	6, MC9S1 0 - \$0FF - \$BFFF \$3FFF 000 - \$0 : 16000	2DP256, I F Pages: I3FF KHz	4C9S12D 16 PP	T256 AGE á	, MCS at: \$	9S12DJ \$0030	256, MG	C9S12D
S>fbulk S>fload								
********								•
•								
Connected 0:15:44	Auto detect	9600 8-N-1	SCROLL	CAPS	NUM	Capture	Print echo	1.

The *S*> will appear again to indicate file is uploaded.

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🏀 BDMPod - HyperTerminal
                                                                                                                                   - 🗆 🗵
File Edit View Call Transfer Help
D 🚅 📨 🥈 🖻 🖻
                                                                                                                                         Can't Communicate With Target CPU
         Set Target Speed (16000 KHz)
   1
  2.) Reset Target
3.) Reattempt Communication
4.) Erase & Unsecure
5.) Enter BDM debugger
?
   $>device
  Device: DP256, MC9S12DP256, MC9S12DT256, MC9S12DJ256, MC9S12DG256, MC9S12A256
EEPROM: $0000 - $0FFF
Flash: $8000 - $BFFF Pages: 16 PPAGE at: $0030
RAM: $1000 - $3FFF
I/O Regs: $0000 - $03FF
Target Speed: 16000 KHz
   $>fbulk
   S>fload
   ************
   ******
  S>
•
                                                                                                                                       ÞÍ
Connected 0:16:54
                       Auto detect
                                    9600 8-N-1
                                                  SCROLL CAPS NUM Capture Print echo
```

Check Power up Vector by using memory Dump at \$FFFF. It should always be non-FFs. Here it is showing the Power on/Reset Vector will start at \$4000.

🗞 BDMPod - HyperTerminal
File Edit View Call Transfer Help
<pre>1.) Set Target Speed (16000 KHz) 2.) Reset Target 3.) Reattempt Communication 4.) Erase &amp; Unsecure 5.) Enter BDM debugger ? S&gt;device Device: DP256, MC9S12DP256, MC9S12DT256, MC9S12DJ256, MC9S12D6256, MC9S12A256 EEPROM: \$0000 - \$0FFF Flash: \$80000 - \$0FFF Flash: \$80000 - \$0FFF I/0 Regs: \$0000 - \$03FF Target Speed: 16000 KHz S&gt;fbulk S&gt;fbulk S&gt;fload ************************************</pre>
Topperted 0:19:440/to detectSCR011CAPSNUMCapturePrint echo

Getting to know the DBUG12 command set by typing *help*.

🍓 BDMPod - HyperTerminal File Edit View Call Transfer Help 🏽 🖆 🖉 🖉 👘 ASM <Address> Single line assembler/disassembler <CR> Disassemble next instruction A Subject of the second of the BF <\$tartAddress> <EndAddress> [<data>] [;nv] Fill memory with data BR [<Address>] Set/Display breakpoints BS <StartAddress> <EndAddress> '<String>' | <Data8> [<Data8>] Block Search BULK Erase entire on-chip EEPROM contents CALL [<Address>] Call user subroutine at <Address> DEVICE [<DevName>] display/select target device EEBASE <Address> Set base address of on-chip EEPROM FBULK [;np] Erase entire target FLASH contents FLOAD [<AddressOffset> | ;b] [;np] [;nf] Load S-Records into target FLASH G [<Address>] Begin/continue execution of user code GT <Address> Set temporary breakpoint at <Address> & execute user code HELP Display D-Bug12 command summary LOAD [[<AddressOffset>] [;f]] | [;b] Load S-Records into memory MD <StartAddress> [<EndAddress>] Memory Display Bytes MDW <StartAddress> [<EndAddress>] Memory Display Words MM <StartAddress> Modify Memory Bytes <CR> Examine/Modify next location Examine/Modify same location </>> or <=> Press Any Key For More\_ Connected 0:22:43 CAPS Print echo Auto detect 9600 8-N-1 NUM Capture

More help

Image: Edit View Call Transfer Help         Image: Solution              > or <->         Examine/Modify same location          > or <->         Examine/Modify previous location          > or <->         Exit Modify Memory command         MMW <startaddress>         MOVE <startaddress>          &gt; EndHddress&gt;          &gt; DestAddress&gt;</startaddress></startaddress>
Image: Second state       Image: Second state
<pre></pre> </td
NOBR [ <address>] Remove One/All Breakpoint(s) PCALL [<address>] Call user subroutine in expanded memory at <address> RD Display CPU registers REGBASE <address> Set base address of I/O registers RESET Reset target CPU RM Modify CPU Register Contents SO Step Over subroutine calls STOP Stop target CPU I [<count>] Trace <count> instructions TCONFIG [<address>=<data8>1   IDLY=<msdelay>]   NONE Configure Target Device UPLOAD <startaddress> <endaddress> [;f] [;<srecsize>] S-Record Memory display USEHBR ION   OFF] Use Hardware/Software Breakpoints VER Display D-Bug12's Version Number VERF I[<addressoffset>] [;f]]   [;b] Verify S-Records against memory contents <register name=""> <register value=""> Set register contents Register Names: PC, SP, X, Y, A, B, D, PP CCR Status Bits: S, XM, H, IM, N, Z, V, C S&gt;help_</register></register></addressoffset></srecsize></endaddress></startaddress></msdelay></data8></address></count></count></address></address></address></address>
Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo