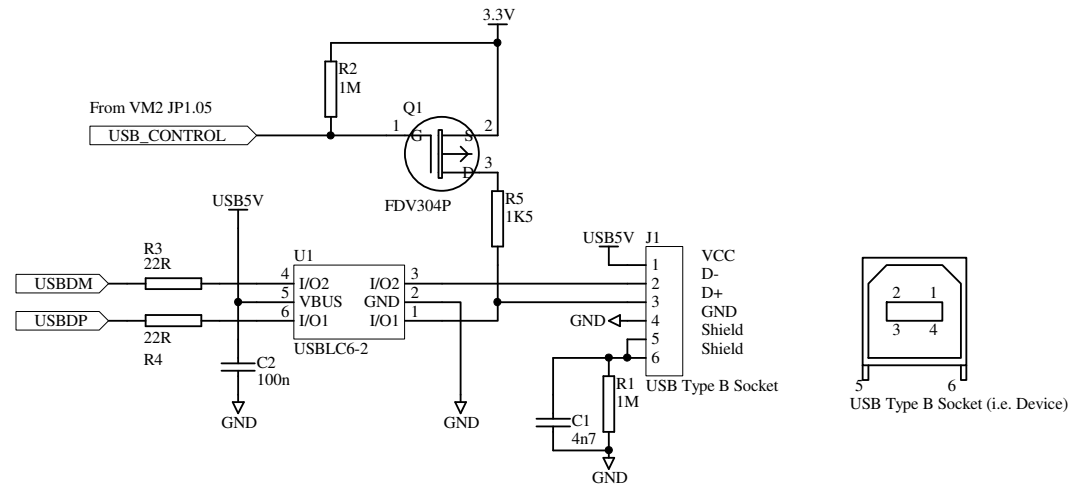


A USB port allows the VM2 to present its internal Flash File System as a USB Flash drive.

As well as normal file transfer operations, this also allows quick and simple production programming of VM2s.



USB 'Slave' Port

Notes:

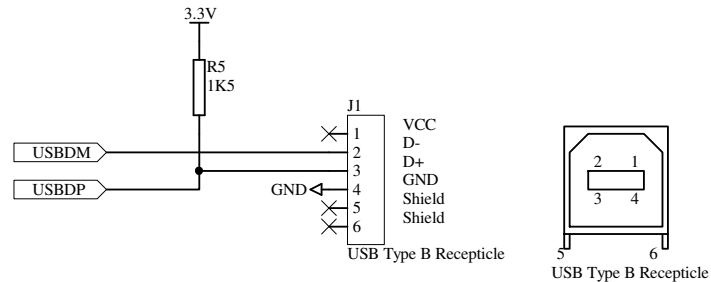
If you are using the USB port for production programming only then you may be able to remove almost all of the components.

U1 is for ESD protection - not needed if your USB port is only exposed in an Anti-Static environment.

Q1 is used to tell the host that the device is present and ready. It's not needed if the device (VM2) is already powered up and ready to communicate when the USB is plugged in.

The shield grounding circuit and series resistors can also be removed for use in a production environment.

To reduce board area you can use a Micro USB receptacle instead of the standard Type receptacle shown.



Reduced USB 'Slave' Port

VM2 USB port	Micro-Robotics Ltd. The Old Maltings 135 Ditton Walk Cambridge CB5 8QB Tel. +44 (0) 1223 523100
Revision:	
Date: 15-May-2012 10:06:14	
Sheet 1 of 1	
File: S:\data\VM Docn\VM2\VM2 Useful Ccts\Sch-USB-port.sch	