



### BeagleBone Pin Headers

U2A	P8/A	B1	↓
	DGND	B3	TFRST
	GPIO1_6	B5	TSCS
	GPIO1_2	B7	TFTDC
	TIMER4	B9	TFTCS
	TIMER5	B11	×
	GPIO1_13	B13	×
	EHRPWM2B	B15	×
	GPIO1_15	B17	×
	GPIO0_27	B19	×
	EHRPWM2A	B21	×
	GPIO1_30	B23	×
	GPIO1_4	B25	×
	GPIO1_29	B27	GPIO1
	GPIO2_22	B29	GPIO2
	GPIO2_23	B31	HEAD2
	UART5_CTSN	B33	HEAD1
	UART4_RTSN	B35	HEAD0
	UART4_CTSN	B37	×
	UART5_TXD	B39	×
	GPIO2_12	B41	×
	GPIO2_10	B43	×
	GPIO2_8	B45	×
	GPIO2_6	B47	×

### U2B

P8/B	B2	↓
DGND	B4	×
GPIO1_7	B6	×
GPIO1_3	B8	×
TIMER7	B10	BUSY
TIMER6	B12	×
GPIO1_12	B14	×
GPIO0_26	B16	×
GPIO1_14	B18	×
GPIO2_1	B20	×
GPIO1_31	B22	×
GPIO1_5	B24	×
GPIO1_1	B26	×
GPIO1_29	B28	×
GPIO2_24	B30	×
GPIO2_25	B32	×
UART5_RTSN	B34	×
UART3_RTSN	B36	×
UART3_CTSN	B38	×
UART5_RXD	B40	×
GPIO2_13	B42	×
GPIO2_11	B44	×
GPIO2_9	B46	×
GPIO2_7	B48	×

### U2C

P9/A	C1	↓
VDD_3V3EXP	C3	×
VDD_5V	C5	×
SYS_5V	C7	×
PWR_BUT	C9	×
PWR_BUT	C11	×
UART4_RXD	C13	×
UART4_TXD	C15	×
GPIO1_16	C17	×
I2C1_SCL	C19	×
I2C2_SCL	C21	×
UART2_TXD	C23	×
GPIO1_17	C25	×
GPIO1_29	C27	×
GPIO3_19	C29	×
SPI1_D0	C31	×
SPI1_SCLK	C33	×
AIN4	C35	×
AIN6	C37	×
AIN2	C39	×
AIN0	C41	×
CLKOUT2	C43	×
DGND	C45	×

### U2D

P9/B	C2	↓
DGND	C4	×
VDD_3V3EXP	C6	×
VDD_5V	C8	×
SYS_5V	C10	×
SYS_RESETN	C12	×
GPIO1_28	C14	×
EHRPWM1A	C16	×
EHRPWM1B	C18	×
I2C1_SDA	C20	×
I2C2_SDA	C22	×
UART2_RXD	C24	×
UART1_TXD	C26	×
GPIO1_29	C28	×
SPI1_CS0	C30	×
SPI1_D1	C32	×
VDD_ADC	C34	×
GNDA_ADC	C36	×
AIN5	C38	×
AIN3	C40	×
AIN1	C42	×
GPIO0_7	C44	×
DGND	C46	×
DGND	C48	×

### Power Net Legend

- +12P fused, from Molex Plug
- +5P fused, from Molex Plug
- +5V unswitched, regulated, from +12P or VCAP
- +3.3VP unswitched, regulated, from +5P
- +5C switched\* cape power, from +5V
- +3.3C switched\* cape power, from +3.3VP
- +3.3V Beaglebone switched & regulated, from +5V
- \*switching can be disabled via JP3

All resistors 62.5mW unless otherwise specified.  
 All NP capacitors X7R 6.3V unless otherwise specified.

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**David Gesswein & Joan Touzet**

Sheet: /  
 File: MFME-RevD-SMD.kicad\_sch

**Title: MFM Disk Reader and Emulator "SMD Edition"**

Size: A3 Date: 2024-02-14  
 Kicad E.D.A. 8.0.0

Rev: D  
 Id: 1/1