

## Data Sheet

### UNI\_EVAL\_BOM.pdf

2 Pages  
Last Revised 24/11/06

#### MicroRWD Universal Evaluation board (+ RS232/USB interface option)

#### Bill of Materials (and suggested equivalents) PCB ver 1.8

Component	Description	Package	Notes
MOD2	MicroRWD RFID module	Wide 24 pin DIL	Various (pin compatible) types to support different transponder/tag types
CON J9	2 row x 10 x 0.1 inch pin header		
CON J3	2-way, 0.1 inch pin header		External 5 volt power supply connector (Farnell 143-139 or equivalent)
CON J1	2.5mm Power Jack Socket PCB Mounting RA		External 6-9 volt power supply connector (Anglia A15M500)
CON J10	9-way D-type socket		RS232 9-way D-type serial connector socket (female) (Farnell 892-452)
CON J8	6-way, 0.1 inch pin header		Antenna selection link header (selects 125kHz or 13.56MHz antenna)
CON J2, J4, J5, J6, J7	2-way, 0.1 inch pin header		2-way link headers (NOTE, DO NOT FIT J6)
ANT L3	700uH antenna coil		External, 7cm diameter, 68 turns, 32 SWG wire, 700uH (RFS stock ANT-125K)
D2	Red LED (SMD)	PLCC-2	Low current Red LED (Farnell 413-4321 or equiv')
D1	Yellow LED (SMD)	PLCC-2	Low current Yellow LED (Farnell 413-4424 or equiv')
R1, R3	1k resistor	0603	0.063W 5%
R2, R4, R8, R9	100R resistor	0805	0.125W 5%
R6, R7	0R resistor (zero ohm)	0805	0.125W 5%
R5	27R resistor	0805	0.125W 5%
L1	22uH (microHenry) inductor	1210	CM45 22?H Inductor 10% (Farnell 557-298)
C12, C13	22pF capacitor	0805	22pF 100v NPO/COG (5%) 0805 capacitor (Farnell 422-7013 or equivalent)
C10	180pF capacitor	0805	180pF 100v NPO/COG (5%) 0805 capacitor (Farnell 718-476 or equivalent)
C11	220pF capacitor	0805	220pF 100v NPO/COG (5%) 0805 capacitor (Farnell 422-7050 or equivalent)
C8, C9	47pF capacitor	0805	47pF 100v NPO/COG (5%) 0805 capacitor (Farnell 422-7037 or equivalent)
C5, C6	47nF capacitor	0603	47nF 16v X7R (10%) 0603 capacitor (Farnell 432-027)
C2	470uF capacitor	B45197 case E	Low ESR 470uF 10v (10%) SMD Tantalum capacitor (Farnell 387-7784 or equivalent) (BA45197A2477K509)
C1, C3, C20	10uF capacitor	MCCT case B	10uF 10v (10%) SMD Tantalum capacitor (Farnell 967-063 or equivalent) (MCCTB106M010)

C4, C7, C14, C15, C16, C17, C18	100nF capacitor	0603	100nF 50v X7R (10%) 0603 capacitor (Farnell 422-6951 or equivalent)
C19	5-50pF trimmer cap	TZC03 SMD	5-50pF trimmer capacitor, 100v rating (muRata TZC3P300A110B00, Farnell 353-1442) or AVX CTZ3E50CW1PF
U1	5v LDO Linear Regulator (LM1117)	SOT223	SMD 500ma 5v linear regulator LM1117 MP-5 or equivalent (Farnell 120-777 or equivalent) (or L7805ACD2T, D2PAK/TO263 5v, 1A linear regulator)
MOD1	FTDI MM232R	Custom	FTDI ( <a href="http://www.ftdichip.com">www.ftdichip.com</a> ) USB to TTL RS232 converter module
U2	MAX202	SO16	MAX202 ECSE (16 pin SO) Maxim or Sipex 202E equivalent

Ver 1.8 PCB component overlay

