

Bill of Materials – 32MX470 single-chip computer with VGA output

Updated: 18-feb-2015

		Qty 1-25	Qty 100+	source	pn:
	PCB - 85mm x 54mm, double sided	TBD			
	cost of loading parts	TBD			
onboard parts:					
	PIC32MX470 procesor, 100pin QFP	\$6.75	\$5.60	microchip	PIC32MX470F512LT-I/PT
	10uF low esr cap for 1v8	\$0.10	\$0.08	mouser	77-VJ0805G106KXQTBC
UF	main crystal (8MHz)	\$0.36	\$0.25	mouser	774-ATS08A-E
UF	VGA socket	\$0.39	\$0.39	ebay (china)	(auction# 181561966518)
UF	PS/2 keyboard socket	\$0.26	\$0.26	ebay (china)	(auction# 281290384545)
	TC1262-3.3	\$0.51	\$0.39	microchip	TC1262-3.3VDBTR
	RTC (PCF8563)	\$1.19	\$0.74	mouser	771-PCF8563T/5518
UF	RTC crystal (32kHz)	\$0.18	\$0.15	mouser	815-AB26T-32.768KHZ
	misc filter caps, 0.1uf ceramic 0603	TBD			
	misc resistors, 0603	TBD			
	3x diodes for video, BAT54 or similar	\$0.21	\$0.12	mouser	78-BAT54WS-E3-18
offboard parts:					
UF	SD card module	\$1.00	\$1.00	ebay (china)	(auction# 251472408054)
UW	backup battery holder (CR2032)	\$0.08	\$0.08	ebay (china)	(auction# 221298022151)
UW	12v -> 5v stepdown converter (LM2596)	\$0.97	\$0.97	ebay (china)	(auction# 400595983355)
UF	40x2 pin header x2	\$0.24	\$0.24	ebay (china)	(auction# 371098470863)
UF	40x1 pin header x1	\$0.08	\$0.08	ebay (china)	(auction# 371177836767)
zero-cost components:					
UF	26x2 header for I/O port A				
UF	26x2 header for I/O port B				
UF	4x1 header for USB port				
UF	4x1 header for audio output				
UF	16x2 header for SD card module				
UF	2x1 header for clock backup battery				
UF	2x1 header for 5v in				
	barrel socket for 12v in	(user to supply)			
	3.5mm stereo socket for audio out	(user to supply)			
	CR2032 backup battery	(user to supply)			

\$12.32 \$10.35

UF = user to fit on PCB

UW = user to wire

Note: all prices are in US dollars