

JUANNE ENGELHARDT

October/November, 1979

FUTURE MEETINGS

No meetings are currently scheduled.

PAST MEETINGS

There were no meetings in August or September.

HELP WANTED

We desperately need a meeting coordinator. The main reason we for have not had any meetings recently is because we have no one to arrange them. If you are willing to act as meeting coordinator, even for a short time, please get in touch with Rick Pinger, ext. 2228.

Help is also needed in laying out the video and I/O boards. The video board can be done from a layout drawing (line routing is indicated), but the I/O board must be done from the schematic. Call Rick Pinger, 5U, ext. 2228, or Mike Beaver, 25U, ext. 227.

ANNOUNCEMENTS

System Buy-Back

The club will buy back systems at the original price as long as there is a waiting list of buyers. Get in touch with Mike Beaver, 25U, to get on the waiting list or to get a refund. No further orders will be taken for the basic system parts (power supply, cabinet) that have already been ordered.

Mother Board

The order form for the Mother Board is included in this issue of Micro-Minutes. The price is not firm because of uncertain production costs and the increasing price of gold. ORDERS MUST BE IN BY NOV. 8, with deliveries expected in December.

The Mother Board holds a maximum of 24 connectors plus two for the front panel board. A minimum system should have at least 10 connectors plus the two for the front panel. We estimate the cost of the bare board at \$37 and connectors at \$3 each. A maximum system would, therefore, cost an estimated \$115.

4 MHz System

A $4MH_Z$ S-100 system is needed to help in testing our CPU board. If you have such a system, or if you can get access to one, please contact Steve Hessel, 1L, ext. 2869. HARDWARE UPDATE 10/79

DESIGN	PC LAYOUT	PROTOTYPE	CHECKOUT & DEBUG	ORDER DATE (EST)	PARTS AVAIL (EST)	EST. COST
Bill Goodman*	N/A	Lloyd Stafford*	Bill Goodman*	Complete	September	\$ 80
Dick Ollins*	N/A	Dick Ollins*	Dick Ollins*	Complete	Nearly comp.	80
Mike Beaver*	Mike Beaver*	Mike Beaver*	John Youden* Steve Hessel*	0ctober	December	115
Doug Pocins*	Mike Beaver*	Mike Beaver *	Doug Pocins	November	February	75
Steve Hessel*	Jack Bamberg*	Harley Wilson *	Steve Joiner* Steve Hessel Bruce Kendall*	November	February	45
Dave Collins* Steve Hessel*	Dave Collins	Bob Knapp		?	?	80?
Steve Hessel*		Bill Ward (wire wrap)	the construction of some services of the servi	?		35?
Steve Hessel*	Ray Wong Rick Pinger*	Keith Hickox * (wire wrap)	John Youden Mike Beaver	November		40?
Steve Hessel*	Mike Beaver*	George Brandle	John Youden Mike Beaver	November	, i	40?
Steve Hessel*		Bob Schuchard [*] (wire wrap)		November??		45?
Steve Hessel						
Terry Gildea						
Paul Zander						
Rich Hope*		Rich Hope*				
Len Cutler* Steve Hessel*						
	Bill Goodman* Dick Ollins* Mike Beaver* Doug Pocins* Steve Hessel* Dave Collins* Steve Hessel* Steve Hessel* Steve Hessel* Steve Hessel* Steve Hessel* Steve Hessel Steve Hessel Terry Gildea Paul Zander Rich Hope* Len Cutler*	Bill Goodman*N/ADick Ollins*N/AMike Beaver*Mike Beaver*Doug Pocins*Mike Beaver*Jack Bamberg*Jack Bamberg*Dave Collins*Dave CollinsSteve Hessel*Dave CollinsSteve Hessel*Ray Wong Rick Pinger*Steve Hessel*Mike Beaver*Steve Hessel*Ray Wong Rick Pinger*Steve Hessel*Paul Zander Rich Hope* Len Cutler*	Bill Goodman*N/ALloyd Stafford*Dick Ollins*N/ADick Ollins*Mike Beaver*Mike Beaver*Mike Beaver*Doug Pocins*Mike Beaver*Mike Beaver*Jack Bamberg*Mike Beaver*Harley Wilson *Dave Collins*Dave CollinsBob KnappSteve Hessel*Dave CollinsBob KnappSteve Hessel*Ray Wong Rick Pinger*Keith Hickox * (wire wrap)Steve Hessel*Mike Beaver*George BrandleSteve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)Steve Hessel*Mike Beaver*Rick Pinger* (wire wrap)Steve Hessel*Mike Beaver*Reorge BrandleSteve HesselMike Beaver*Rob Schuchard* (wire wrap)Steve HesselRich Hope* Len Cutler*Rich Hope* Rich Hope*	DESIGNPC LAYOUTPROTOTYPE& DEBUGBill Goodman*N/ALloyd Stafford*Bill Goodman*Dick Ollins*N/ADick Ollins*Dick Ollins*Mike Beaver*Mike Beaver*Mike Beaver*John Youden*Steve Hessel*Jack Bamberg*Harley Wilson *Steve Hessel*Dave Collins*Dave CollinsBob KnappSteve HesselSteve Hessel*Dave CollinsBob KnappJohn Youden Mike BeaverSteve Hessel*Dave CollinsBob KnappJohn Youden Mike BeaverSteve Hessel*Dave CollinsBob KnappJohn Youden Mike BeaverSteve Hessel*Ray Wong Rick Pinger*Keith Hickox * (wire wrap)John Youden Mike BeaverSteve Hessel*Mike Beaver*George BrandleJohn Youden Mike BeaverSteve Hessel*Bob Schuchard* (wire wrap)John Youden Mike BeaverSteve Hessel*Rich Hope* Len Cutler*Rich Hope* Len Cutler*Rich Hope*	DESIGNPC LAYOUTPROTOTYPE& DEBUG(EST)Bill Goodman*N/ALloyd Stafford*Bill Goodman*CompleteDick Ollins*N/ADick Ollins*Dick Ollins*CompleteMike Beaver*Mike Beaver*Mike Beaver*John Youden* Steve Hessel*CompleteDoug Pocins*Mike Beaver*Mike Beaver*Doug Pocins Steve Hessel*NovemberJack Bamberg*Harley Wilson * Bob KnappSteve Joiner* Steve Hessel Bruce Kendall*NovemberSteve Hessel*Dave Collins Rick Pinger*Bill Ward (wire wrap)?NovemberSteve Hessel*Ray Wong Rick Pinger*Keith Hickox * (wire wrap)John Youden Mike BeaverNovemberSteve Hessel*Ray Wong Rick Pinger*Bob Schuchard* (wire wrap)NovemberNovemberSteve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)NovemberNovemberSteve Hessel*Rick Pinger*Bob Schuchard* (wire wrap)NovemberNovember??Steve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)November??November??Steve HesselRich Hope* Len Cutler*Rich Hope* Len Cutler*Rich Hope*November	DESIGNPC LAYOUTPROTOTYPE& DEBUG(EST)(EST)Bill Goodman*N/ALloyd Stafford*Bill Goodman*CompleteSeptemberDick Ollins*N/ADick Ollins*Dick Ollins*CompleteNearly comp.Mike Beaver*Mike Beaver*Mike Beaver*Doug PocinsOctoberDecemberSteve Hessel*Jack Bamberg*Mike Beaver *Harley Wilson *Steve HesselNovemberFebruaryDave Collins*Dave CollinsBob KnappSteve Hessel???Steve Hessel*Ray Wong Rick Pinger*Bill Ward (wire wrap)John Youden Mike Beaver??Steve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)John Youden Mike BeaverNovember?Steve Hessel*Ray Wong Rick Pinger*Bill Ward (wire wrap)???Steve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)NovemberNovemberSteve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)NovemberNovemberSteve Hessel*Bob Schuchard* (wire wrap)NovemberNovemberSteve Hessel*Mike Beaver*Bob Schuchard* (wire wrap)November??Steve Hessel*Bibl Schuchard* (wire wrap)November??Steve Hessel*Bibl Schuchard* (wire wrap)November??Steve Hessel*Bibl Schuchard* (wire wrap)November??Steve Hessel*Bob Schuchard* (wire wrap)November??Paul Zander Len

*Complete

SYSTEM COST COMPARISON (by Steve Hessel)

UNIT	OUR EST. COST	ADVANTAGES OF OUR SYSTEM	COST FOR BARE BOARD & OUR PARTS	KIT	ASSEMBLED
Cabinet	\$ 80.	RFI shielding		\$ 200.	\$ 380.
Power Supp	ly 80.			115.	175.
Mother Bd.	115.	Lower cross-talk and lower noise		160.	226.
CPU Board	45.	Fast buss signals high drive capa- bility	\$ 65.	130.	180.
PROM Board	40.	Address anticipa- tion for faster operation	94.	125.	150.
Video Boar	1 115.	Many additional functions when compared to mod- erately priced bo	125. s.	92.	190.
16K Ram	40.	Vrite protect, parity	70.	305.	520.
I/O + tap	e 45.	Tape format soft- ware controlled		107.	250.
Front Panel	75.				
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ORDER FORM FOR MOTHER BOARD

Be sure to indicate the number of connectors wanted for Mother Board.

NAME _	JOANNE	ENGELH	AROT	Mother	Board:	\$ 37.00	
BLDG.	60				ectors fo nt panel:		· · · · · · · · · · · · · · · · · · ·
EXT.	3528			ali je su	mectors		
	625		2		ner Board		
AMOUNT	\$ 115,00			\$3.0) each	72	100
					FOTAL:	\$ 115	

Send Order Form to Mike Beaver, 25U. Make check payable to: HP Microcomputer Interest Group.

Please Note: It will be much easier to install an adequate number of connectors on the Mother Board in the beginning rather than add on later. Remember that each connector needs 100 solder connections. The initial group can be wave soldered (autAomatic) but later additions must be done by hand. For most systems, 12 connectors will be sufficient; but large memory systems need more, as do systems intended for speech or music applications.

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