TECHNICAL BULLETIN FROM GLOBAL BUSINESS SYSTEMS

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SMC ARCNET-PC130 now supported

The 8-bit ISA-bus SMC ARCNET-PC130 Arcnet card is now supported by Global System Manager V8.1 (BOS) and Global System Manager V8.1 (MS-DOS and Windows).

SMC ARCNET-PC130 HARDWARE CONFIGURATION

The set of jumpers on the bottom left of the card is used to set up the IRQ level as follows:-

EXT

•	•	2	always leave open
•	•	1	always leave open
•	•	ROM	always leave open
•	•	7	close to select IRQ7
•	•	5	close to select IRQ5
•	•	4	close to select IRQ4
•	•	3	close to select IRQ3
•	•	2	close to select IRQ2

The interrupt level is set by removing all the jumpers except the one required.

Switch bank S2 is used to set up the I/O address and memory address. The first 3 switches in switch bank S2 are mapped to one of the 8 I/O addresses available for the card:-

S2-1	S2-2	S2-3	I/O address
Down	Down	Down	#0260
Down	Down	Up	#0290
Down	Up	Down	#02E0
Down	Up	Up	#02F0
Up	Down	Down	#0300
Up	Down	Up	#0350
Up	Up	Down	#0380
Up	Up	Up	#03E0

Important Note: The default address of #0240 CANNOT be used with the SMC ARCNET-PC130 card. We recommend an address of #02E0.

The next 3 switches in switch bank S2 select the RAM address of a 16Kb

block of memory on the card:-

S2-4 address	S2-5	S2-6	Memory
Down	Down	Down	#C0000
Down	Down	Up	#C4000
Down	Up	Down	#CC000
Down	Up	Up	#D0000
Up	Down	Down	#D4000
Up	Down	Up	#D8000
Up	Up	Down	#DC000
Up	Up	Up	#E0000

The last 2 switches in bank S2 (i.e. S2-7 and S2-8) MUST be set to the Down position.

The network ID is set up using switch S1 with S1-1 the least significant bit and S1-8 the most significant bit. A switch in the Up position signifies a bit value of 0; a switch in the Down position signifies a bit value of 1. Some example node-id's are as follows:-

Node-id	S1-1	S1-2	S1-3	S1-4	S1-5	S1-6	S1-7	S1-8
A	Down	Up	Up	Up	Up	Up	Up	Up
B	Up	Down	Up	Up	Up	Up	Up	Up
E	Down	Up	Down	Up	Up	Up	Up	Up
P	Up	Up	Up	Up	Down	Up	Up	Up
Z	Up	Down	Up	Down	Down	Up	Up	Up
1B	Down	Down	Up	Down	Down	Up	Up	Up

SMC ARCNET-PC130 GLOBAL CONFIGURATOR OPTIONS

LAN controller "ARCNET" (+J5CF02) is used to access the SMC ARCNET-PC130 network card. When Global Configurator is used to add or amend an ARCNET controller, a number of configuration-specific prompts will appear in addition to the standard prompts described in section 3.7 of the Global Configurator Manual. The I/O addresses MUST be changed from the default value of #0240.

If the nucleus variant is pre-V4.3, the following configuration-specific prompts will appear in addition to the standard prompts described in section 3.7 of the Global Configurator Manual:-

Status register address	(#0240):2E0
Interrupt mast register	(#0240):2E0
Command register	(#0241):2E1
Software reset port	(#0248):2E8
Interrupt vector address	(#0028):<CR>
Interrupt channel	(2):<CR>
Top byte memory address	(#0D):<CR>

When the I/O base address of the card is changed from the default value of #0240, the Status register address (base+0), Interrupt mask register (base+0), Command register (base+1) and Software reset port (base+8) must be modified accordingly.

If the IRQ level is changed from the default value of 2, the Interrupt vector address and Interrupt channel must be modified accordingly.

If the memory address is changed from the default value of #0D0000 the "Top byte of memory address" must be modified accordingly.

If the nucleus variant is V4.3, or later, the following configuration-specific prompts will appear in addition to the standard prompts described in section 3.7 of the Global Configurator Manual:-

Base port address	(#0240):2E0
Software reset port	(#0248):2E8
Interrupt channel	(2):<CR>
Top byte of memory address	(#0D):<CR>

When the I/O base address of the card is changed from the default value of #0240, the Base port address (base+0) and Software reset port (base+8) must be modified accordingly.

If the IRQ level is changed from the default value of 2, the Interrupt channel must be modified accordingly.

If the memory address is changed from the default value of #0D0000 the "Top byte of memory address" must be modified accordingly.