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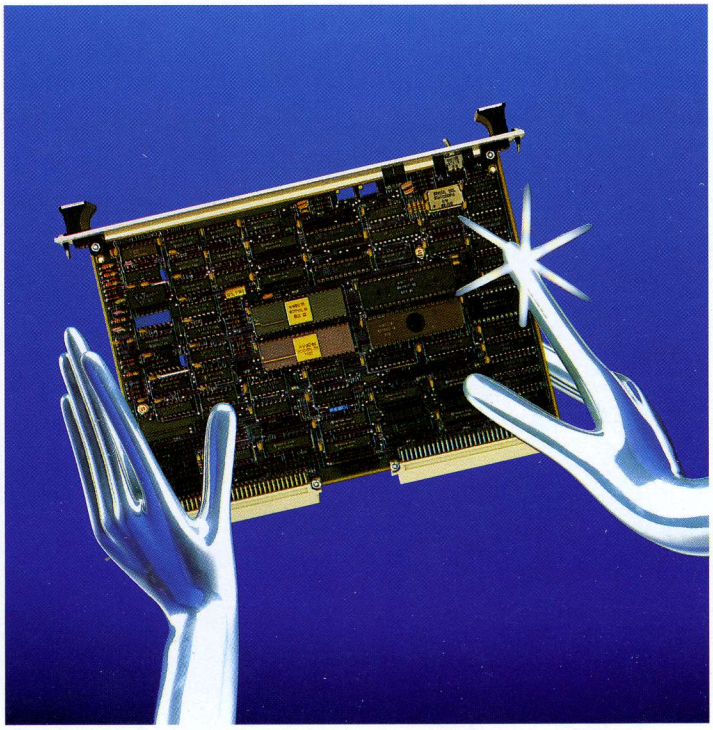
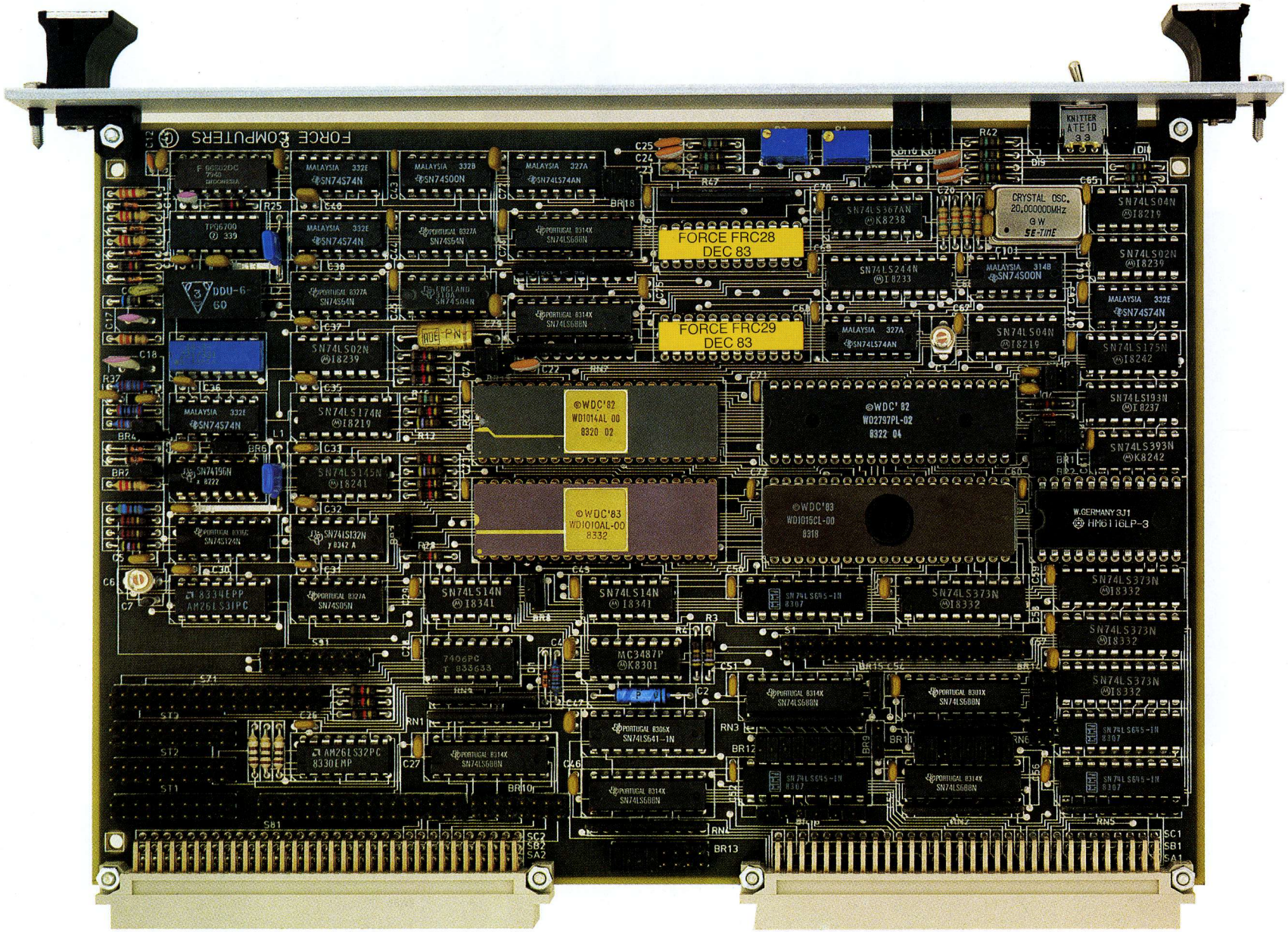


System 68000 VME
SYS68K/WFC-1
Winchester/Floppy Controller


FORCE COMPUTERS
FORCE FRC28
DEC 83
FORCE FRC29
DEC 83
CRYSTAL OSC.
20,000000MHz
GW
SE-TIME
KNITTER
ATE1D
WDC'82
WD1014AL 00
8320 02
WDC' 82
WD2797PL-02
8322 04
WDC'83
WD1010AL-00
8332
WDC'83
WD1015CL-00
8318
W.GERMANY 3J1
HM6116LP-3
MC3487P
K8301
7406PC
T 838633
AM26LS32PC
8330EMP
8334EPP
AM26LS31PC
SN74LS14N
I8341
SN74LS373N
I8332
SN74LS04N
I8219
SN74LS02N
I8239
SN74LS175N
I8242
SN74LS193N
I8237
SN74LS393N
K8242
SN74LS174N
I8219
SN74LS145N
I8241
SN74LS132N
SN74LS244N
I8233
SN74LS367AN
K8238
SN74LS645-1N
8307
SN74LS640-1N
8306
SN74LS688N
SN74S74N
SN74S00N
SN74S04N
SN74S05N
SN74S64N
SN74S196N
DDU-6-60
TP6700
MALAYSIA
PORTUGAL
ENGLAND
S1
S2
S81
SC2
SB2
SA2
SC1
SB1
SA1

General Description

The SYS68K/WFC-1 board is a low cost controller board based on the VME bus. It contains a Winchester controller, a Floppy controller, a sector buffer (1k byte), and an ECC diagnostic processor. The SYS68K/WFC-1 board is able to generate an interrupt to the VME bus (levels 1-7) and to drive two different software programmable auto interrupt vectors.

The interface to the Floppies is Shugart compatible and the interface to the Winchester is ST506 compatible.

SYS68K/WFC-1 Features

- Controls up to three 5 1/4'' Winchesters
- Controls up to four 5 1/4'' Floppies
- Fully VME bus compatible (A32:D16/A24:D16)
- Generation of two different interrupts with free jumper selectable interrupt level (1-7)
- Auto interrupt vectoring with free programmable vector
- Free selectable access address including address modifier
- Programmable sector size up to 1k byte
- Automatic track formatting on hard disk
- Up to 5Mbit/sec data transfer rate
- 5 bit single burst error correction
- Five easy to use macro commands
- RUN/LOCAL switch
- LED indicators for RUN/LOCAL, ERROR and BUSY information

Functional Description

The SYS68K/WFC-1 board can control Floppies and Winchesters depending on the loaded command register and on several other powerful registers. The SYS68K/WFC-1 contains 8 registers and a FIFO buffer (First In First Out) for stored data. An interrupt can be generated by the SYS68K/WFC-1 at the end of command or at data request depending on the loaded command in this case, the interrupt vector has to be loaded before entering a command. The SYS68K/WFC-1 executes five easy to use macro commands:

Restore · Seek · Read Sector
Write Sector · Format Track

Commands are executed by loading the command byte into the command register while the controller is not busy.

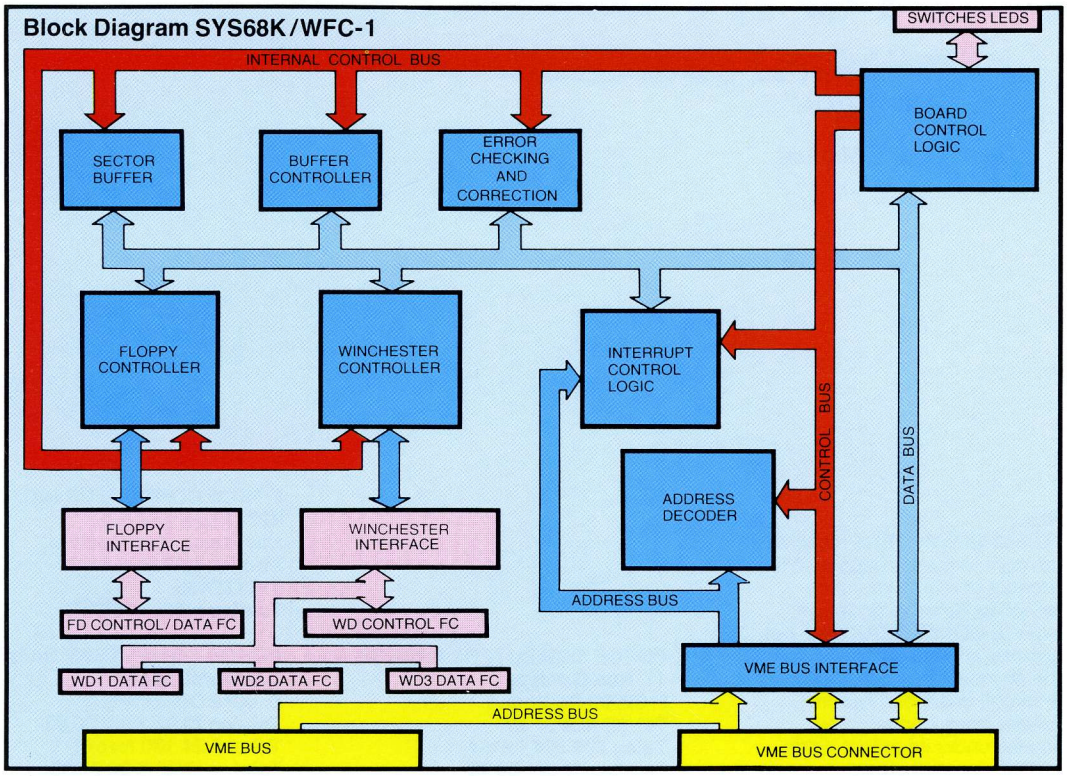
The RUN/LOCAL switch isolates the board from the bus during failures or maintenance. This mode is indicated by two LED's on the front panel.

The interface for the Winchesters is ST506 compatible (Seagate) and the interface for Floppies is Shugart compatible. All necessary drivers/receivers and buffers are on-board.

Five connectors are provided for connection of up to three Winchester and four Floppy drives. All signals to the Floppies are placed on one 34 pin male connector where a flat cable can be plugged in and all signals are daisy chained.

The Winchester control lines are available on one 34 pin male connector. They are also daisy chained and require similar termination.

The data cables on the Winchester are radially connected to each drive via three 20 pin flat cables.



Specification

Interface	ST506 for 5 1/4'' Winchester drives SA460 for 5 1/4'' Floppy drives
Devices	Floppy controller Winchester controller ECC/Buffer controller
Interrupt	Free selectable interrupt level Two different interrupt vectors
Bus	VME bus compatible (A32:D16/A24:D16) Free selectable board base address and address modifier code (AM0-AM5)
Power Requirements	+5V/3.0A max
Operating Temperature	0 to +50 degrees C
Storage Temperature	–50 to +90 degrees C
Drive Cable Length	3 meters max
Board Dimensions	Double Eurocard 234 x 160 mm (9.2 x 6.3 inch)

Ordering Information:

SYS68K/WFC-1 Part No. 300001	Winchester Floppy Controller Board including UM
SYS68K/WFC-UM Part No. 800009	User's Manual

Note:
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FORCE COMPUTERS FRANCE
11, Rue Casteja
F-92100 Boulogne
Tel. (1) 620 37 37
Telex 206 304 forc-f
Telefax (1) 621 35 19

FORCE COMPUTERS INC.
727 University Ave.
Los Gatos, CA 95030
Phone (408) 354-3410
Tlx 172465
Telefax (408) 3957718

FORCE COMPUTERS GmbH
Daimlerstraße 9
D-8012 Ottobrunn
Telefon (0 89) 6 09 20 33
Telex 5 24 190 forc-d
Telefax (089) 6 09 77 93

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