The Zorro III expansion bus provides <u>clock signals</u> for expansion boards. These clocks are for <u>synchronous</u> Zorro II designs and for other synchronous activity such as bus arbitration. While originally based on Amiga local bus clocks, these have no guaranteed relationship to any local bus activity in newer Amiga computers, but are maintained in Amiga computers as part of the expansion bus specification. The relationship between these clocks is illustrated in Figure K-3.

# /C1 Clock

This is a 3.58 MHz clock (3.55 MHz on PAL systems) that's synched to the falling edge of the 7M system clock.

# /C3 Clock

This is a 3.58 MHz clock (3.55 MHz on PAL systems) that's synched to the rising edge of the 7M system clock.

### CDAC Clock

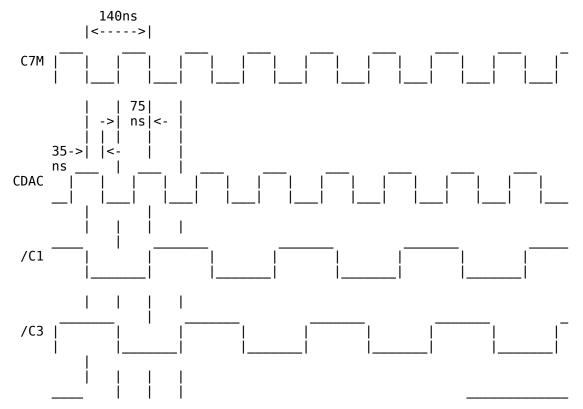
This is a 7.16 MHz system clock (7.09 MHz on PAL systems) which trails the 7M clock by 90 degrees (approximately 35ns).

# E Clock

This is the 68000 generated "E" clock, used for 6800 family peripherals driven by "E" and 6502 peripherals driven by phi(2). This clock is four 7M clocks high, six clocks low, as per the 68000 spec. Note that the bus does not support the rest of the 68000's 6800/6502 compatible interface; there may be better ways to clock such devices.

## E7M Clock

This is the 7.16 MHz system clock (7.09 MHz on PAL systems). This clock forms the basis for all  $\underline{\text{Zorro II}/68000}$  compatible activity, and for various other system functions, such as bus arbitration.



Ε

Figure K-3: Expansion Bus Clocks

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