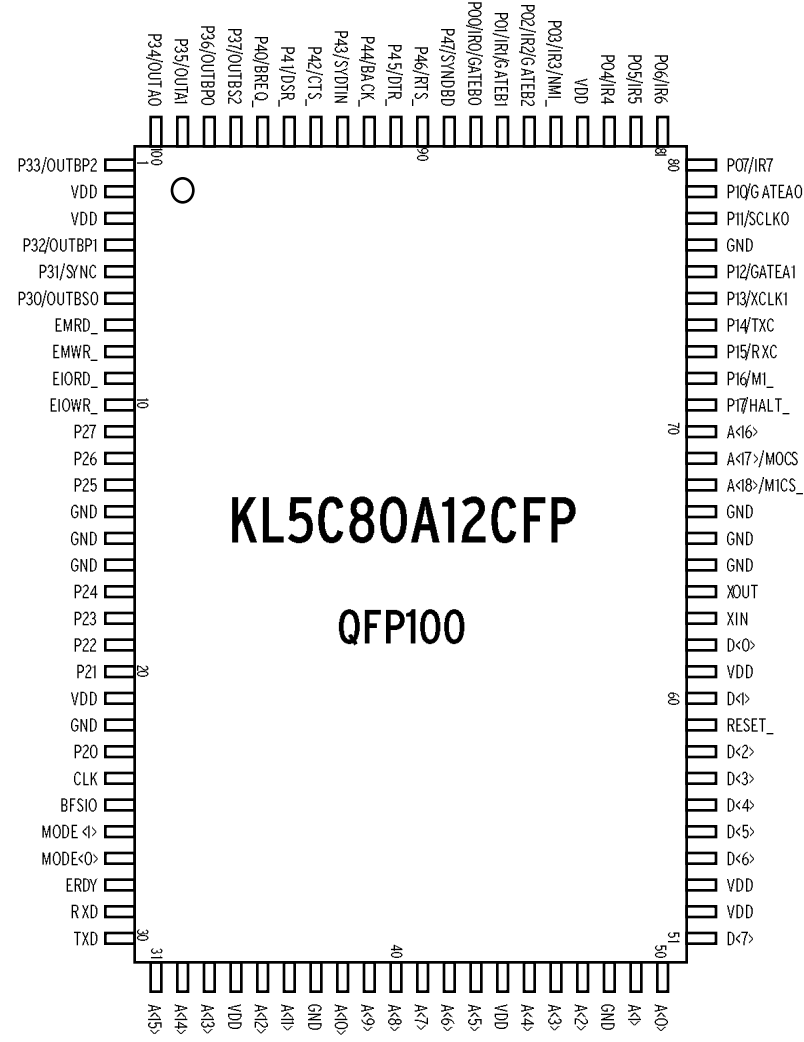


KL5C80A12CFP



PIN CONFIGURATION



KL5C80A12CFP
QFP100

Fig. 1 KL5C80A12CFP Pin Configuration

KL5C80A12CFP



BLOCK DIAGRAM

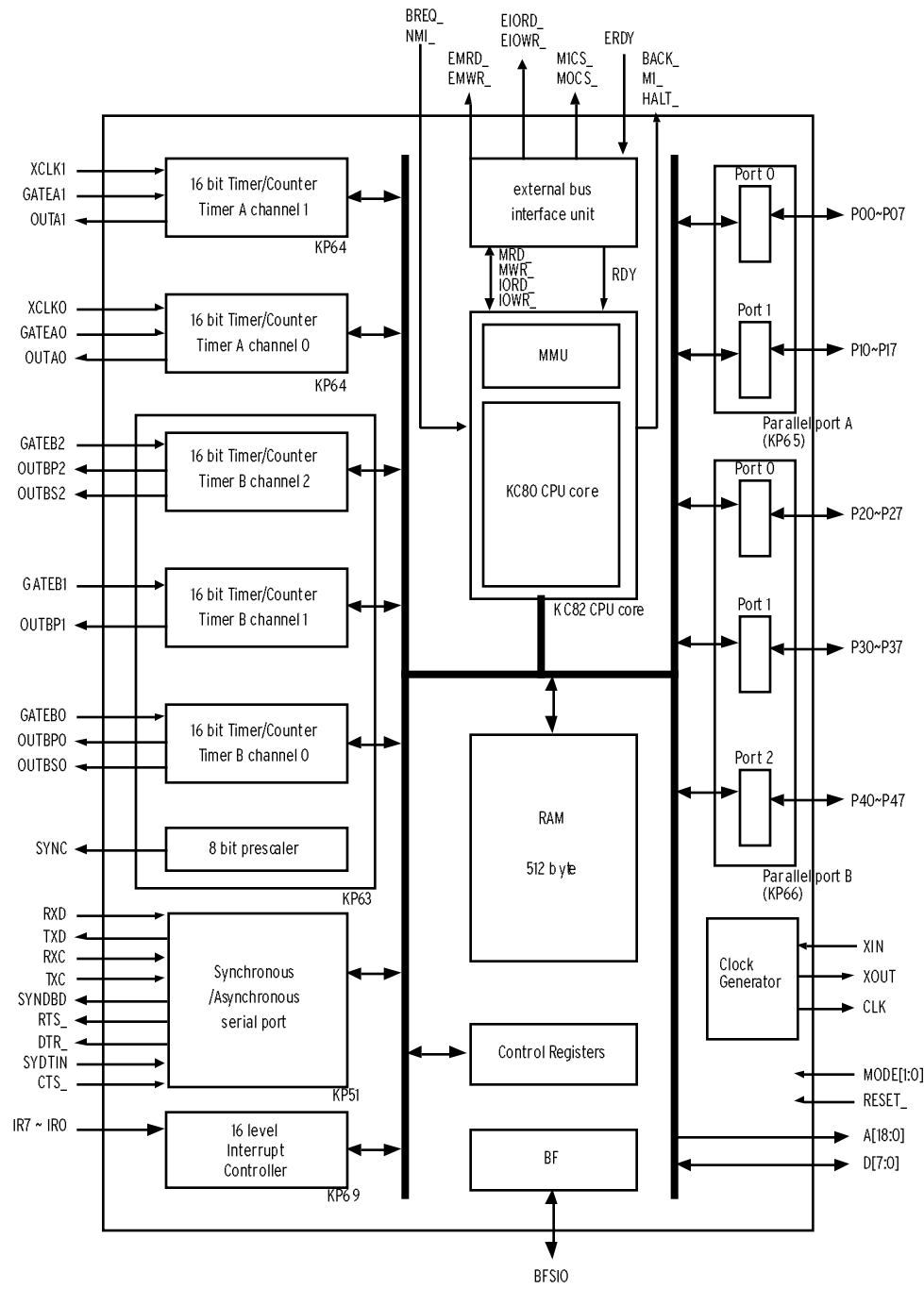


Fig. 2 KL5C80A12CFP Block Diagram

KL5C80A12CFP

FUNCTIONS

| | |
|------------------|--|
| Address space | 512 K byte |
| CPU registers | 8 bit x 16 (general purpose), 16 bit x 4 and 8 bit x 2 (special purpose) |
| Machine cycle | Min. instruction execution time = 100 nsec. |
| Instruction set | Z80 fully compatible at binary level. |
| I/O ports | Total 40 bit (16; bit wise configurable in/out direction, 24; 4-bit wise configurable in/out direction, bit set/reset function for output ports) |
| Serial interface | Full-duplex USART x 1 channel, MAX baud rate 2Mbps |
| Timers | 16 bit multifunctional timer/counter x 2 channels 16 bit timer/counter x 3 channels with 8 bit prescaler Event, interrupt and interval count, PWM, WDT operation modes |
| Interrupts | Maskable interrupts 16 inputs (8; external, 8; internal) Non-maskable interrupts 1 input (external), Mode2(vector) interrupt operation Supports multiple interruption |
| On chip memory | 512 byte high speed synchronous RAM (no wait accessible) |
| Other functions | Clock generator, wait-state controller and embedded debug logic which cooperates with external 'Bug Finder™' system |
| Package | QFP 100 pin |

DEBUG TOOLS

| | |
|---------------|--|
| Bug Finder | Handy type debug tool from TANAKA Electric Co. (TW-001) and Unitek Electric Co. (UBR-820/830) Supports IBM PC/AT and compatibles as platform. |
| ADVICE™ | ICE from Yokogawa Digital Computer Co. |
| Partner-ET80™ | ROM-ICE from Kyoto Microcomputer Co. |
| iD 1600A™ | ROM-ICE from Computex Co. Full support for KC82 MMU address extension. |

COMPILERS

| | |
|--------------------|--|
| LSI-C80 Ver. 3.4 | From LSI Japan Co. Linker (knll™) fully supports KC82 MMU address extension. |
| ICC Z80 | From IRA Systems AB Supports KC82 MMU address extension. |
| HI-TECH C Ver. 7.4 | From HI-TECH software Inc. Fully supports KC82 MMU address extension. |