

MK14E VDU BOM

| RefDes | Value | Description | Notes | Supplier Part No. | Quantity |
|------------------|--------------------|----------------------------|--|---------------------|----------|
| C1-7,12-21 | 100nF | Ceramic capacitor | | | 17 |
| C8 | 6n8 | Ceramic capacitor | | | 1 |
| C9 | 220pF | Ceramic capacitor | | | 1 |
| C11 | 150pF | Ceramic capacitor | | | 1 |
| C22 | 33uF/35V | Electrolytic capacitor | | | 1 |
| D1 | 1N4148 | Small signal silicon diode | | | 1 |
| IC1 | 74LS86 | Quad 2-input EOR | | | 1 |
| IC2 | 74LS20 | Dual 4-input NAND | | | 1 |
| IC3 | 74LS393 | 4-bit binary counter | | | 1 |
| IC4,18 | 74LS74 | Dual JK flip flop | | | 2 |
| IC5 | 4011B | Quad 2-input NAND | | | 1 |
| IC6 | 74HCT4040 | 12-stage binary counter | must be HCT | | 1 |
| IC7,12 | 74LS04 | Hex inverter | | | 2 |
| IC8 | 74LS157 | Quad 2 to 1-line selector | | | 1 |
| IC9,10 | 74LS244 | Octal tri-state buffer | | | 2 |
| IC11 | 74LS27 | Triple 3-input NOR | | | 1 |
| IC13 | 4082B | Dual 4-input AND | | | 1 |
| IC14 | 74LS00 | Quad 2-input NAND | | | 1 |
| IC15a | 2732 | 4K x 8-bit EPROM | 200 or 250nS speed rating | | 1 |
| IC15b,16 | 74LS166 | 8-bit shift register | | | 2 |
| J1 | Phono socket | Video | | | 1 |
| J2 | 2x3 0.1" | | CPU control | | 1 |
| LK1 | 0.1" x 3 header | Top | Links Top to either A8 or A10 | | 1 |
| LK2 | 0.1" x 2 header | Reverse | Links Reverse to GND | | 1 |
| LK3 | 0.1" x 3 header | Graph/Char | Links Graph/Char to either Top or Flag2 | | 1 |
| LK4 | 0.1" x 3 header | Invert Bit | Selects Graphics Invert Bit as either D6 or D7 | | 1 |
| LK5 | 0.1" x 2 header | ON/OFF | Links ON/OFF to Flag1 | | 1 |
| LK6 | 0.1" x 2 header | Invert | Links Invert to GND | | 1 |
| LK7 | 0.1" x 2 header | Font A | Font select bit 0 | | 1 |
| LK8 | 0.1" x 2 header | Font B | Font select bit 1 | | 1 |
| LK9 | 0.1" x 3 header | Clock | Selects Osc or CPU clock | | 1 |
| PL1 | DIN41612 AB 64-way | Right angle plug | | | 1 |
| Q1,2,4 | BC239 | NPN transistor | | | 3 |
| R1,9 | 100R | 250mW resistor | | | 1 |
| R2,5,10-15,17-21 | 4K7 | 250mW resistor | R12 not required for MK14E | | 13 |
| R3,4 | 27K | 250mW resistor | | | 2 |
| R6 | 1K0 | 250mW resistor | | | 1 |
| R7 | 2K7 | 250mW resistor | | | 1 |
| R8 | 3K3 | 250mW resistor | | | 1 |
| R16 | 470R | 250mW resistor | R16 not required for MK14E | | 1 |
| RP1 | 4K7 x 8 | Resistor network | | Bourns 4609X-101 | 1 |
| S1 | 8-way | DIL switch | Page Select | | 1 |
| S2 | PCB mount | Toggle switch | VDU On/Off | e.g. C&K 7101MD9AGE | 1 |
| TP1 | Test points | | Port connections | | 1 |
| X1 | 4MHz | 4-pin crystal oscillator | | | 1 |
| IC1-5,7,11-14,17 | 14-pin | DIL socket | | | 11 |
| IC6,8,15b,16 | 16-pin | DIL socket | | | 4 |
| IC9,10 | 20-pin | DIL socket | | | 2 |
| IC15a | 24-pin | DIL socket | | | 1 |