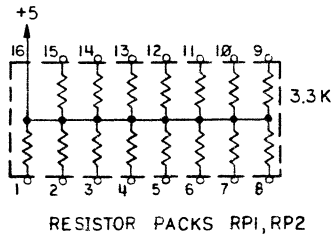
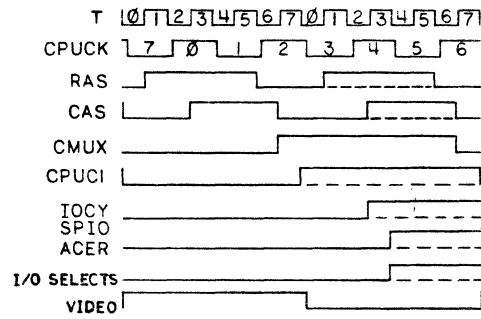


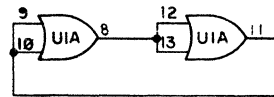
NOTE: UNLESS OTHERWISE SPECIFIED

1. ALL RESISTORS VALUE ARE IN OHMS
1/4 WATT ± 5%
2. ALL CAPACITORS ARE IN MICROFARADS.

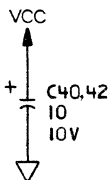
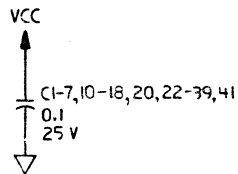
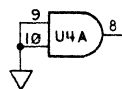
TIMING



SPARE GATES



LS08



| REFERENCE DESIGNATIONS | | |
|------------------------|-----------|----------|
| DEVICE | LAST USED | NOT USED |
| CR | CR1 | --- |
| Q | Q2 | --- |
| J | J1 | --- |
| R | R17 | --- |
| C | C42 | --- |
| RP | RP2 | --- |
| SW | --- | --- |
| L | L1 | --- |
| Y | Y1 | --- |

| J1 | | J1 | |
|------------------|-------|-----|-----------------------------------|
| 5-1A | SL0 | 1 | 2 SH0 5-1A |
| 5-1A | SL1 | | SH1 5-1B |
| 5-1B | SL2 | | SH2 5-1B |
| 3-4C | INT0 | | IAK0 3-2D |
| 3-4C | INT1 | 9 | IAK1 3-2D |
| 3-4C | INT2 | | IAK2 3-2D |
| 3-4C | RSIR | | KBR 3-4C |
| 3-1B, 3-4C | IOIR | | E 3-2C |
| | DGND | | DGND |
| | +5 | 19 | +5 |
| 3-2D | RESET | | CPUCK 2-3C |
| 3-2D | LDMA | | BGACK 3-4D, 4-2B, 5-2B |
| 3-4C | BR | | BG 3-3C |
| 3-4A | BD0 | | BD1 3-4A |
| 3-4A | BD2 | 29 | BD3 3-4A |
| 3-4A | BD4 | | BD5 3-4A |
| 3-4A | BD6 | | BD7 3-4A |
| 3-4A | BD8 | | BD9 3-4A |
| 3-4B | BD10 | | BD11 3-4B |
| 3-4B | BD12 | 39 | BD13 3-4B |
| 3-4B | BD14 | | BD15 3-4B |
| 3-4B | DGND | | DGND |
| | +5 | | +5 |
| 5-2D, 4-2D, 3-2C | A1 | | A2 3-1C, 4-2D, 5-2D |
| 5-2D, 4-2D, 3-2C | A3 | 49 | A4 3-1C, 4-2D, 5-4D |
| 4-2D, 3-1C | A5 | | A6 3-1C, 4-2D |
| 4-2D, 3-2D | A7 | | A8 3-1C, 4-2D |
| | A9 | | A10 3-1C |
| 3-2D | A11 | | A12 3-1C, 5-2B |
| 5-2B, 3-1C | VMA | 59 | VPA 3-4C, 3-2D |
| 3-2C | +12 | | DTACK 5-1C |
| 3-2C, 3-4C | AS | | READ 3-4B, 3-2C, 4-4D, 4-4E, 5-4D |
| 3-2C | LDS | | UOS 3-2C |
| 5-2D, 3-2B | CSYNC | | INT10 5-1B |
| 5-2A | VA10B | 69 | VA9B 5-2A |
| 2-4A | R1 | | R2 2-4A |
| 5-4A, 3-4A | MD0 | | MD1 3-4A, 5-4A |
| 5-4A, 3-4A | MD2 | | MD3 3-4A, 5-4A |
| 5-4A, 3-4A | MD4 | | MD5 3-4A, 5-4A |
| 5-4A, 3-4A | MD6 | 79 | MD7 3-4A, 5-4A |
| 5-4A, 3-4B | MD8 | | MD9 3-4A, 5-4A |
| 5-4A, 3-4B | MD10 | | MD11 3-4A, 5-4A |
| 5-4A, 3-4B | MD12 | | MD13 3-4A, 5-4A |
| 5-4A, 3-4B | MD14 | | MD15 3-4A, 5-4A |
| 5-4A, 3-4B | DGND | 89 | DGND |
| | +5 | | +5 |
| 4-1B | RA1 | | RA2 4-1B |
| 4-1B | RA3 | | RA4 4-1B |
| 4-1B | RA5 | | RA6 4-1B |
| 4-1B | RA7 | | RA8 4-1B |
| 3-4C | RSTSW | 99 | RA9 4-1B |
| 3-1D | A17 | | A16 3-1D |
| 3-1D | A19 | | A18 3-1D |
| 5-1D | MREAD | | DOTCK 4-4B, 5-A4 |
| 2-1D | RAS | | CAS 2-1C |
| 5-2C | HSYNC | 109 | A20 3-1C |
| 5-2D | VSYSN | | HDER 3-2C, 5-1D |
| 5-2C, 3-2B | VDI | | SFER 3-2C, 5-1D |
| | DGND | | NMI 3-1C |
| | +5 | 119 | DGND |
| | | 120 | +5 |

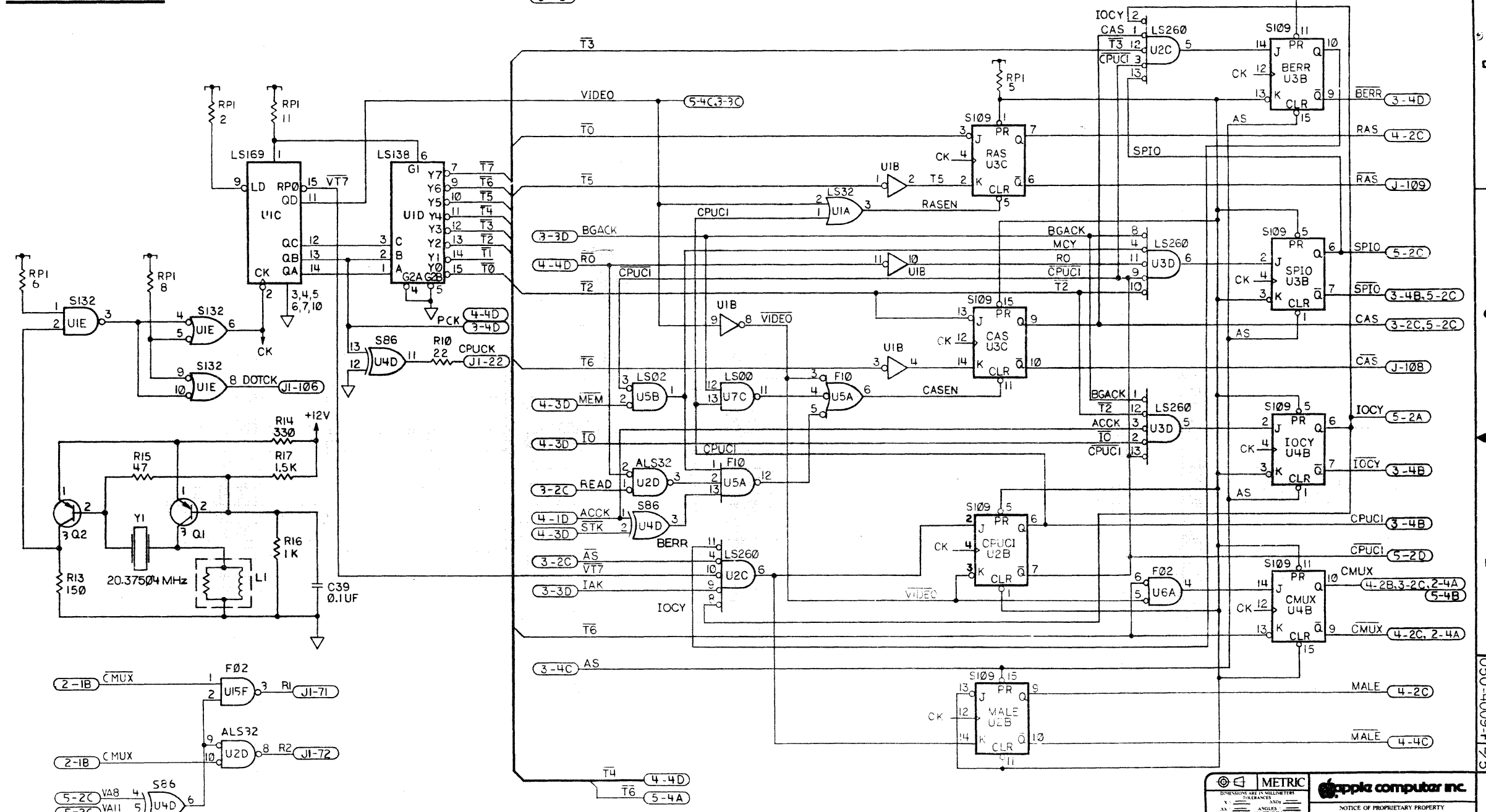
| DEVICE | NAME | +5V | GND | FG# |
|--------------------|-----------------------------|----------|----------|---------|
| 74LS00 | U7C, 6D, 15F | 14 | 7 | 3, 4, 5 |
| 74LS04 | UIB | | | 2, 5 |
| 74LS08 | U4A | | | 5 |
| 74LS11 | UI0C | | | 3 |
| 7417 | U2E | | | 3, 5 |
| 74LS32 | UIA | | | 2, 4 |
| 74ALS32 | U2D | | | 2, 4 |
| 74LS36 | U7A | | | 5 |
| 74S06 | U4D | 14 | 7 | 2, 5 |
| 74S109 | U3A, 2B, 3B, 4B, 3C, 5D, 3E | 16 | 8 | 2, 4, 5 |
| 74S132 | UIE | 14 | 7 | 2, 5 |
| 74S138 | UID | 16 | 8 | 2 |
| 74LS138 | UI3F | | | 5 |
| 74LS139 | UI4F | | | 5 |
| 74LS148 | UI2F | | | 3 |
| 74LS153 | U6E, 7E, 8E, 5F | | | 4 |
| 74LS156 | U4F | | | 3 |
| 74LS166 | U7F, 8F | | | 5 |
| 74S169 | UIC | 16 | 8 | 2 |
| 74LS244 | U8C, 15C, 9E | 20 | 10 | 3 |
| 74LS245 | U11A, 1B, 14E, 15E, 9F, 11F | 20 | 10 | 3, 4 |
| 74LS259 | U4E | 16 | 8 | 5 |
| 74LS260 | U2C, U3D | 14 | 7 | 2 |
| 74LS279 | U5C | 16 | 8 | 3 |
| 74F283 | U8B, 9B, 10B | 16 | 8 | 4 |
| 74LS373 | U9D | 20 | 10 | 4 |
| 74LS374 | U6B, 11C, 7D, 11D, 11E, 13E | 20 | 10 | 3, 4 |
| 74LS393 | U7B, 5E, 6F | 14 | 7 | 5 |
| 74ALS1002 | U6A, U5B | 14 | 7 | 2, 5 |
| 68000 | UI3A | 14, 4, 9 | 16, 5, 3 | 3 |
| 74F10 | U5A | 14 | 7 | 2, 3 |
| 2148-H RAM, STATIC | U8A, 9A, 10B | 18 | 9 | 4 |
| ROM, HI | UI3D | 28 | 14 | 3 |
| ROM, LO | UI4D | 28 | 14 | 3 |
| 556 | UI5B | 14 | 7 | 3 |

| REV | ZONE | ECO # | REVISION | DATE | APPD |
|-----|------|-------|--|------|------|
| A | | B097 | INITIAL RELEASE | | |
| B | | B120 | SHEET 1-ADDED C40 & C42; SHEET 1-5 MISC. CORRECTION TO SHEET-TO-SHEET DESIGNATORS & SIGNAL NAMES. | 7/82 | AJC |
| C | 4D | B136 | SHEET 4-2-4C WAS J1-106, 2-3C WAS 2-2D, PCK WAS T5, T4 WAS T3, PIN 15 (USD) WAS PIN 11, ADDED RPI-5 TO U5D, ADDED PIN 11 TO USD | | |
| D | 2B | B142 | SHEET 2- SWITCHED PIN NUMBERS 2 & 3 AND THEIR TRACES ON U2B. SHEET 3- 341-0175 WAS 374-0070, 341-0176 WAS 341-0071. | | |
| E | | B160 | SHEET 2- U2B PIN 3 WAS CONNECTED TO U4B PIN 10, 15 NOW UIB PIN 8; REFERENCE REMOVED FROM UIB PIN 2. SHEETS 4 & 5- MADE MINOR CLARIFICATION CORRECTIONS | | |
| F | 4D | B181 | SH3- C8 WAS 1.0 | 7/82 | TR |

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| <p>DATE: R.A. 4/82</p> | | <p>TITLE: SCHEMATIC, CPU LISA</p> | |
| <p>DESIGNER: G. MARTEN</p> | | <p>DRAWING NUMBER: 050-4009-F</p> | |

050-11009-F 1/5

NOTE: UNLESS OTHERWISE SPECIFIED

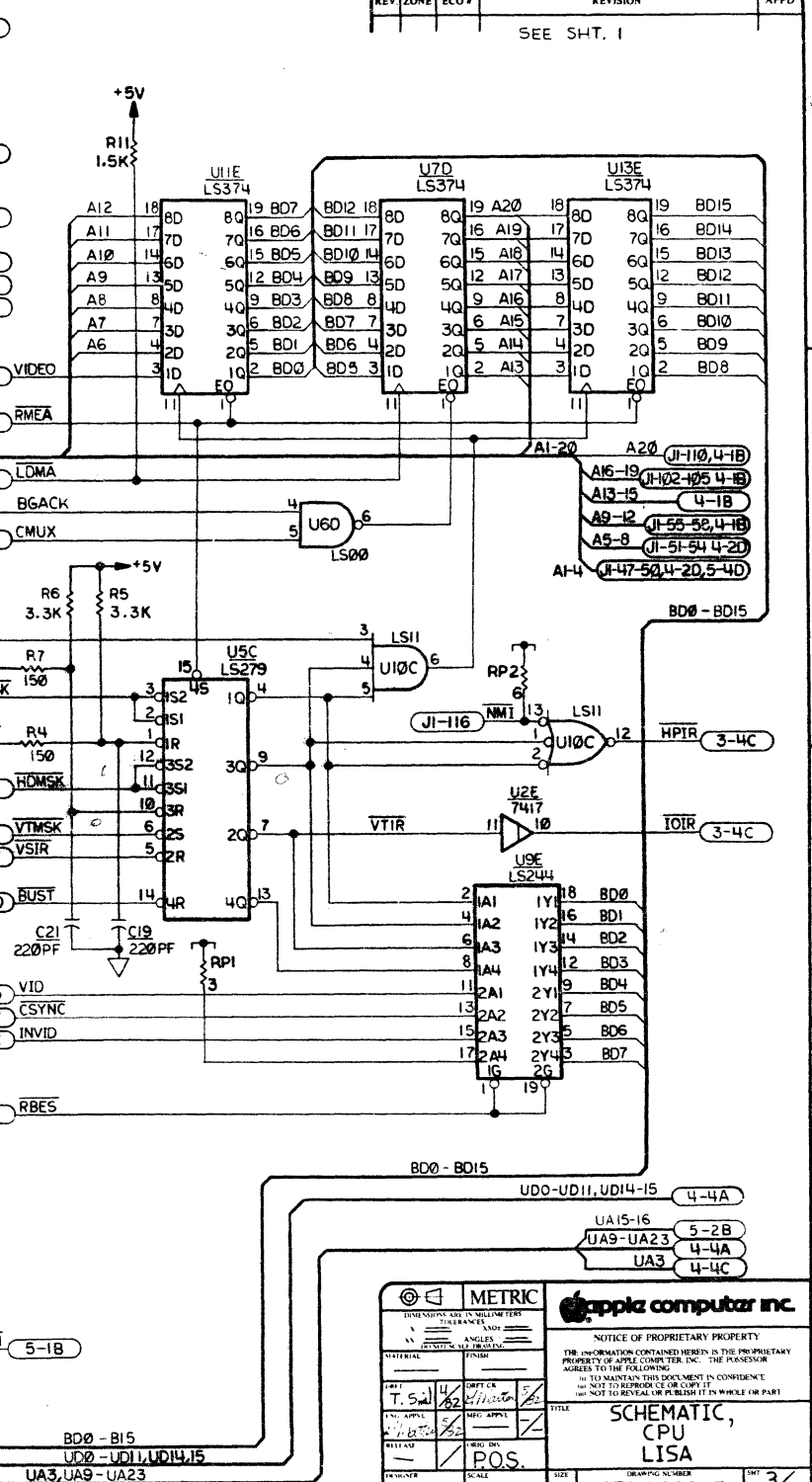
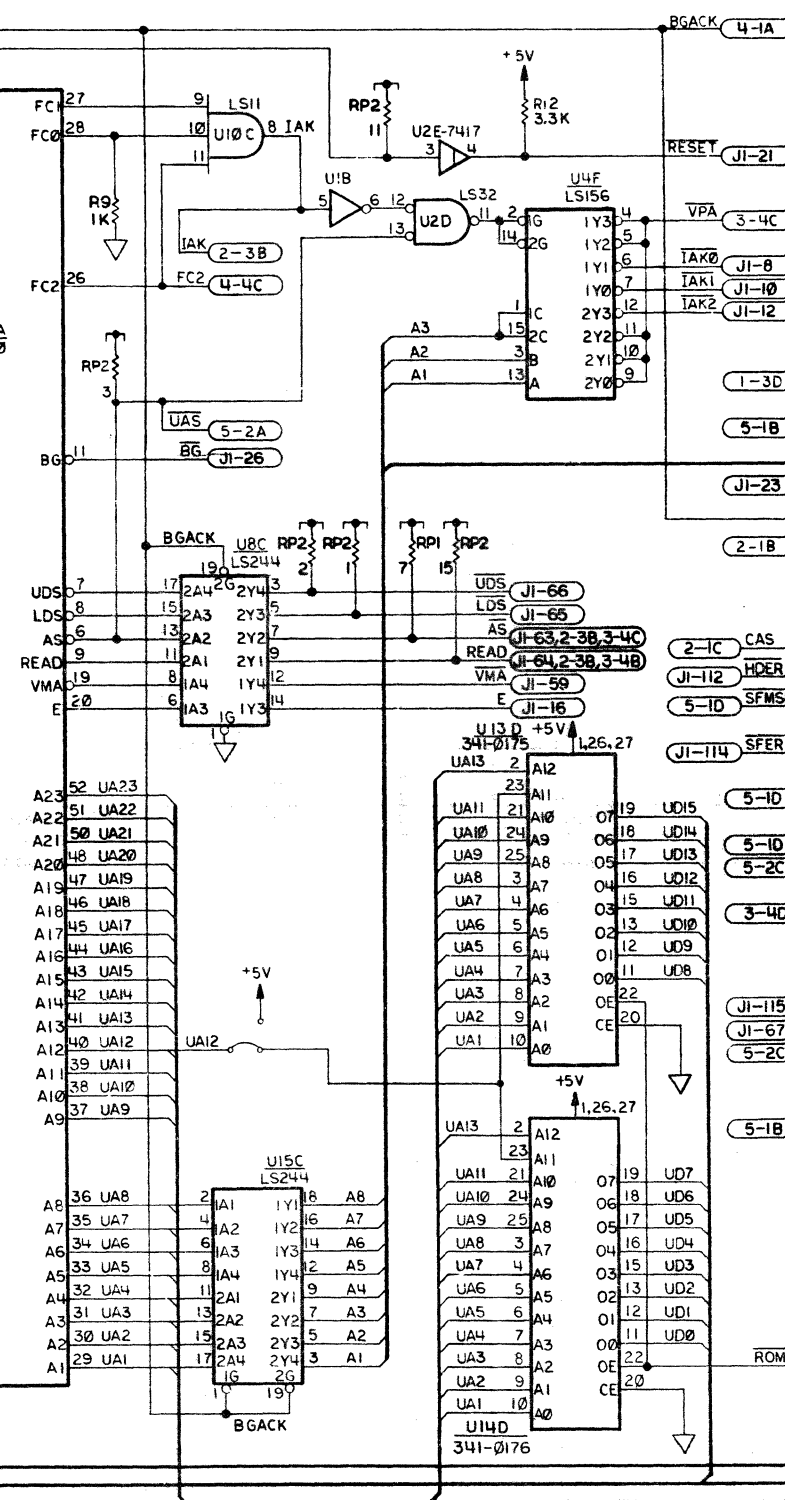
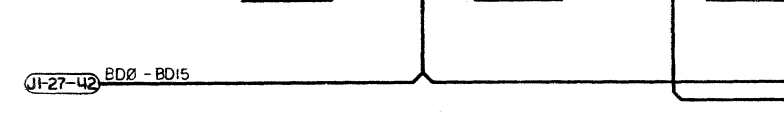
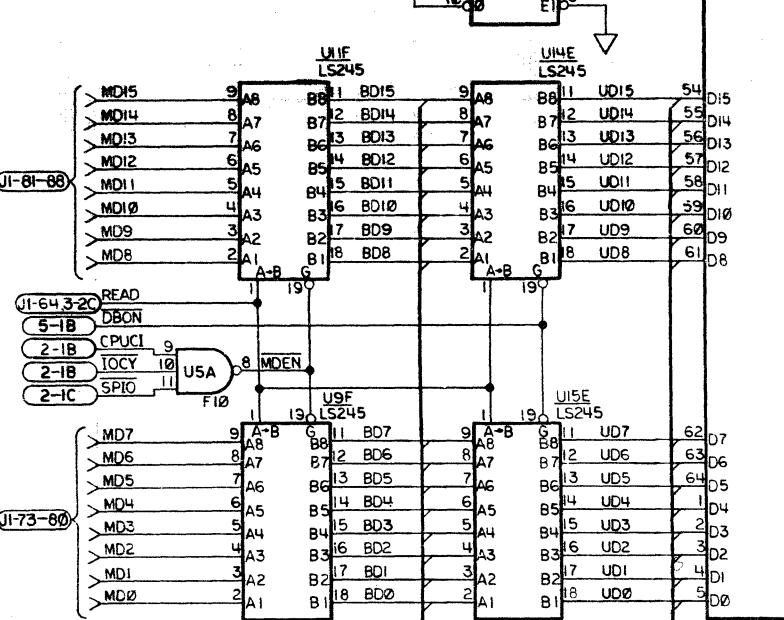
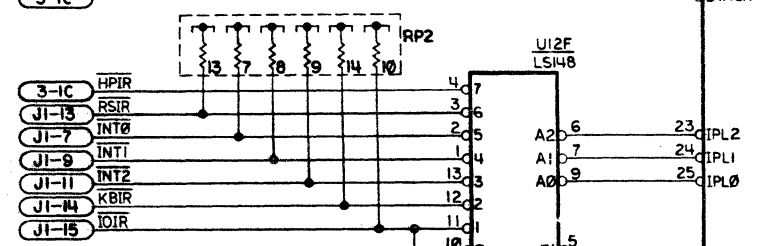
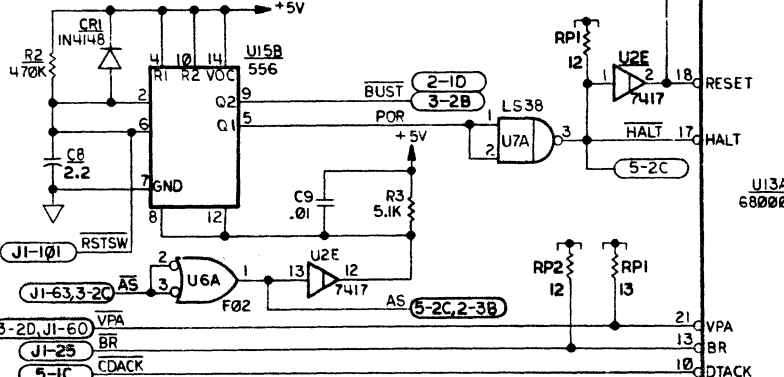


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050-1009-F 2/5

NOTE: UNLESS OTHERWISE SPECIFIED

- 2-3C PCK
- J1-24 BGACK
- 2-10 BERR

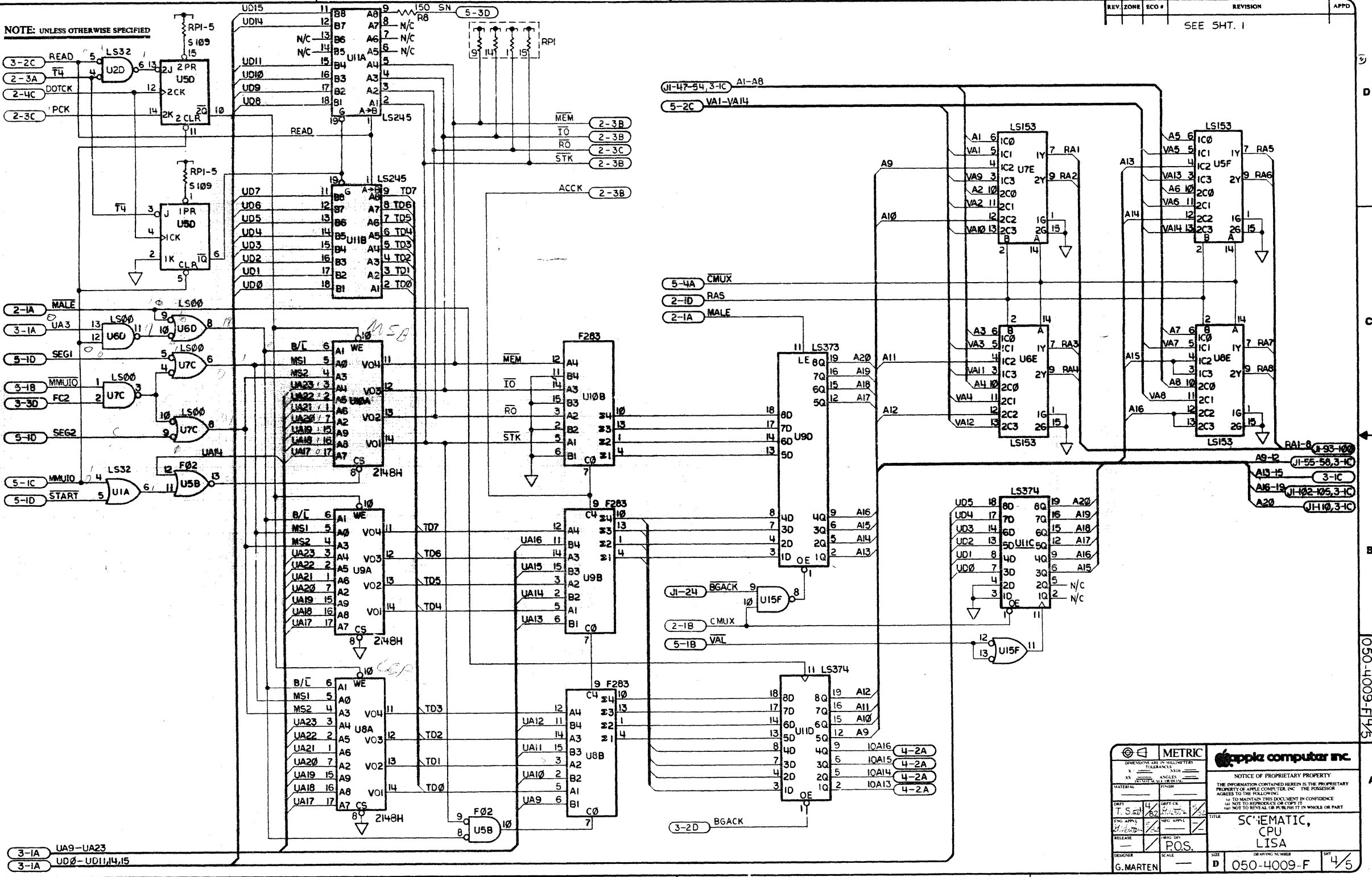


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| TITLE SCHEMATIC, CPU LISA | | DRAWING NUMBER 050-4009-F | |
| DESIGNED BY G. MARTEN | | DATE 3/5 | |

050-4009-F 3/5

NOTE: UNLESS OTHERWISE SPECIFIED

| REV | ZONE | ECO # | REVISION | APPD |
|-----|------|-------|------------|------|
| | | | SEE SHT. 1 | |



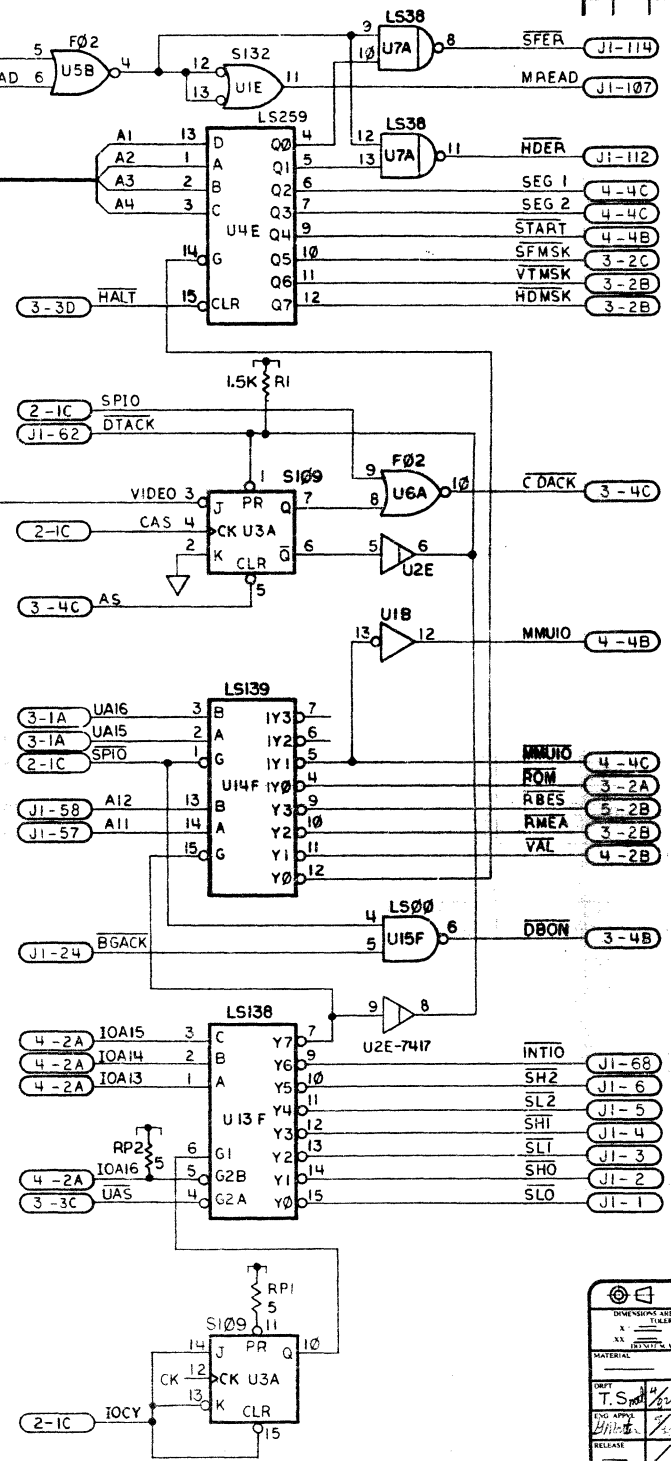
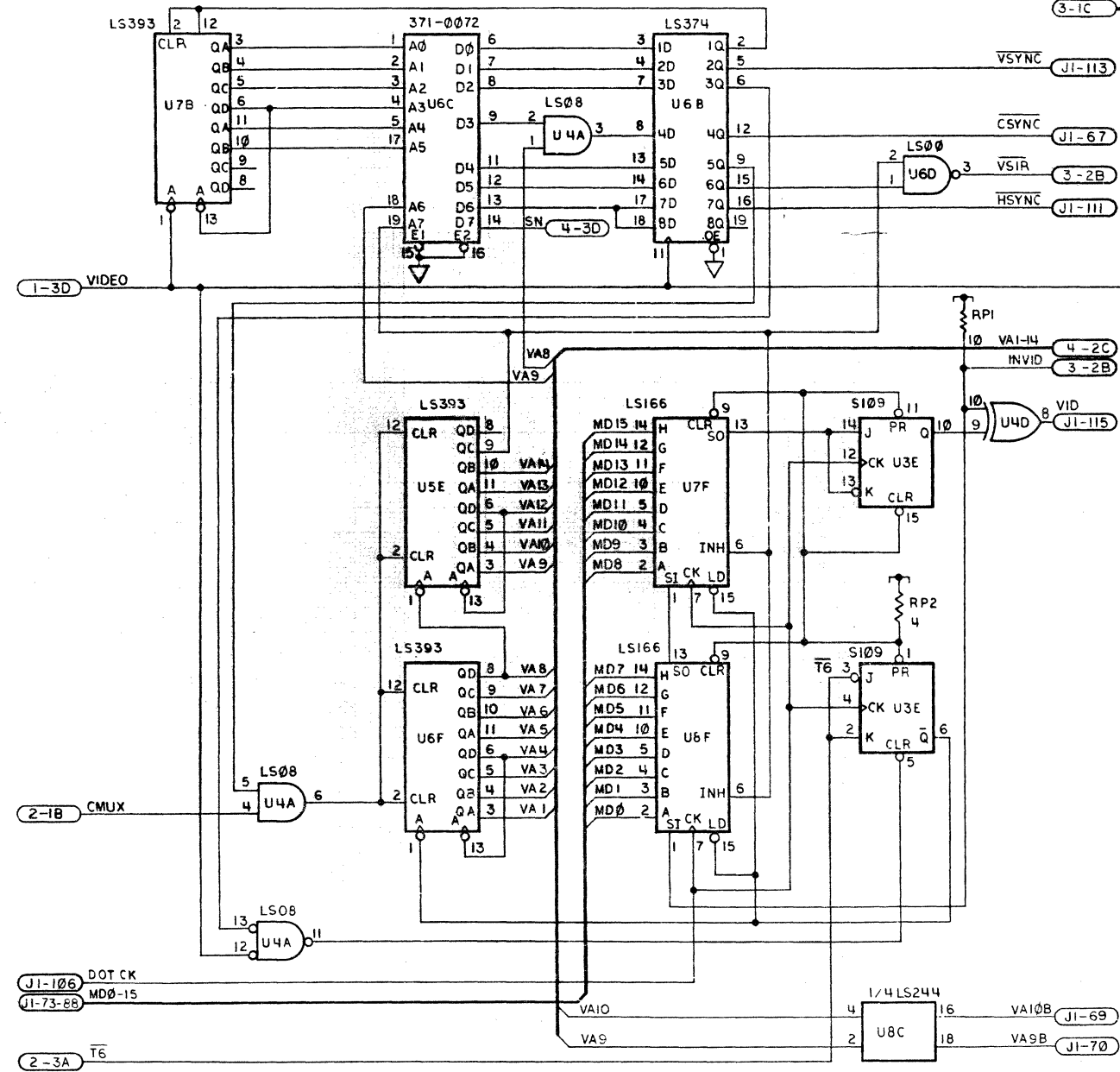
3-1A UA9-UA23
3-1A UD0-UD11,14,15

- 4-2A 10A16
- 4-2A 10A15
- 4-2A 10A14
- 4-2A 10A13

| | | | |
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| <small>RELEASE</small> | <small>SCALE</small> | <small>DATE</small> | <small>SIZE</small> D |
| <small>DESIGNER</small> G. MARTEN | <small>SCALE</small> | <small>DATE</small> | <small>SIZE</small> D |

050-4009-FH/5

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SEE SHT. 1

| | | | |
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| DESIGNER G.MARTEN | SCALE | DRAWING NUMBER D 050-4009-F | |

050-4009-F 5/5