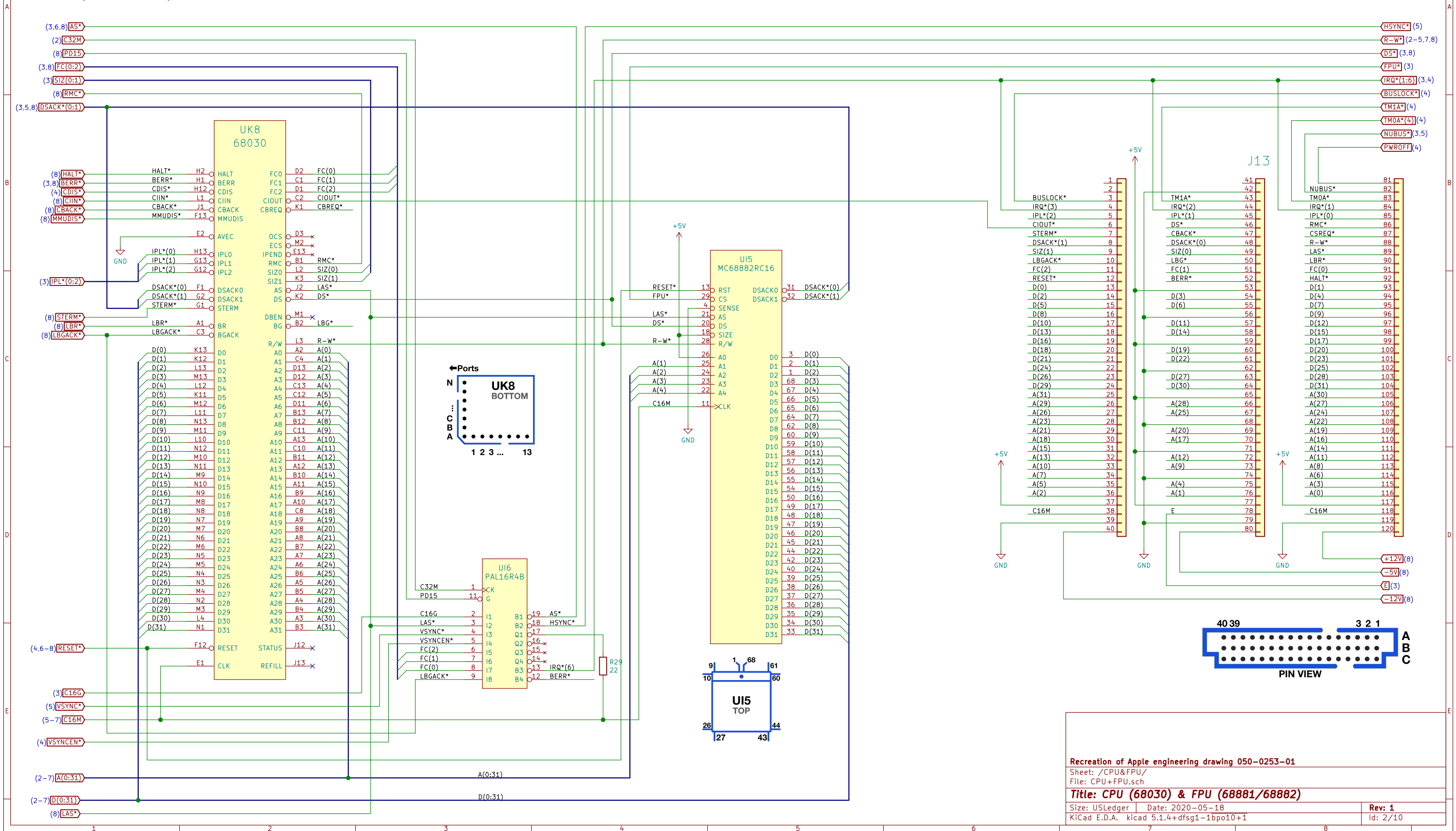


# NOTE: Unless otherwise specified

1. All resistance values are in ohms, +/- 5%, 1/8 watt.
2. All capacitance values are in microfarads.
3. ( ) denotes sheet to sheet references.
4. Cold & hot ground are connected together at two locations, near the ADB connectors and at the sound circuit.



Recreation of Apple engineering drawing 050-0253-01

Sheet: /CPU&FPU/

File: CPU+FPU.sch

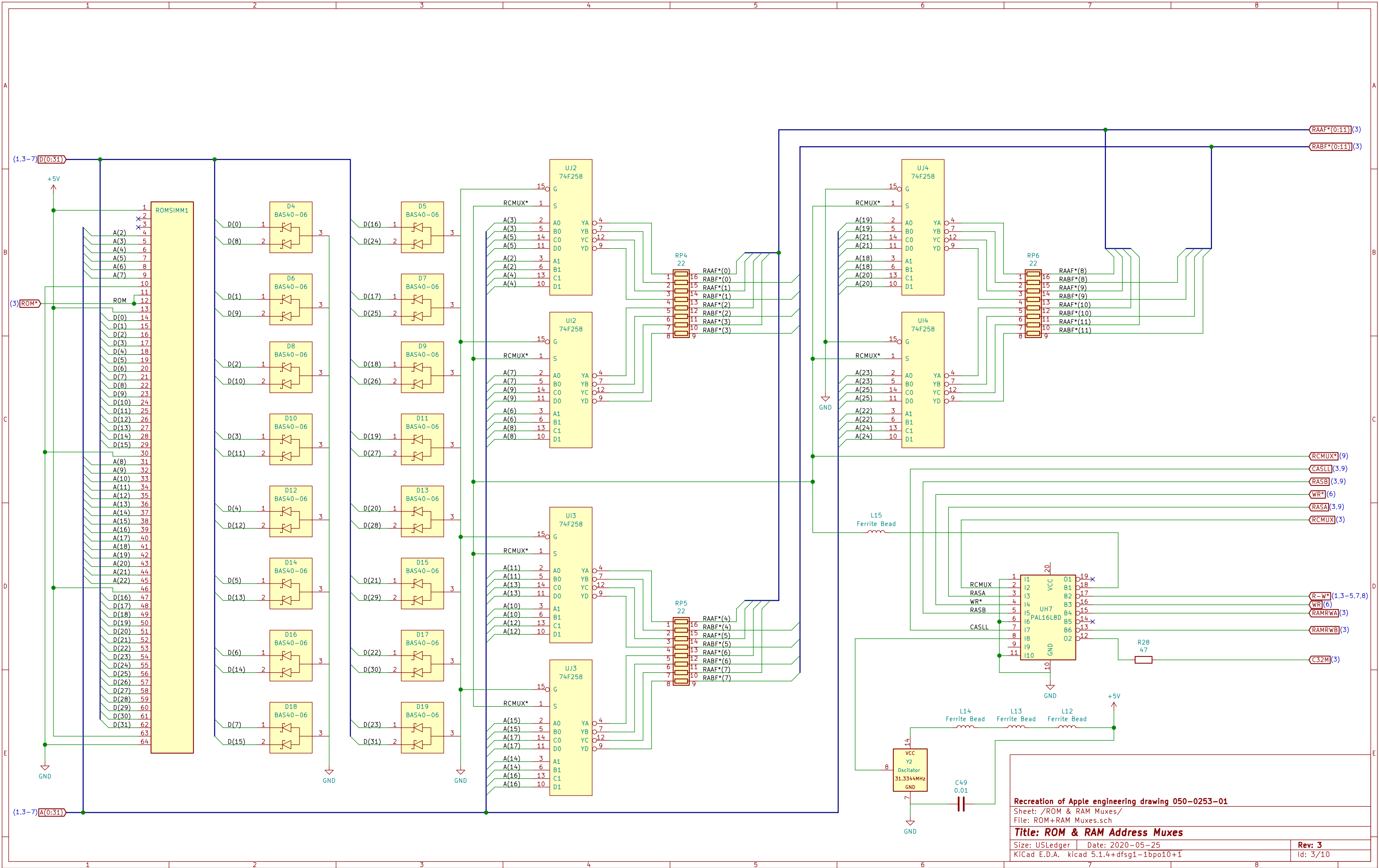
Title: CPU (68030) & FPU (68881/68882)

Size: USLedger Date: 2020-05-18

KiCad E.D.A. kicad 5.1.4+dfsg1-1bpo10+1

Rev: 1

Id: 2/10



Recreation of Apple engineering drawing 050-0253-01

Sheet: /ROM & RAM Muxes/  
File: ROM+RAM Muxes.sch

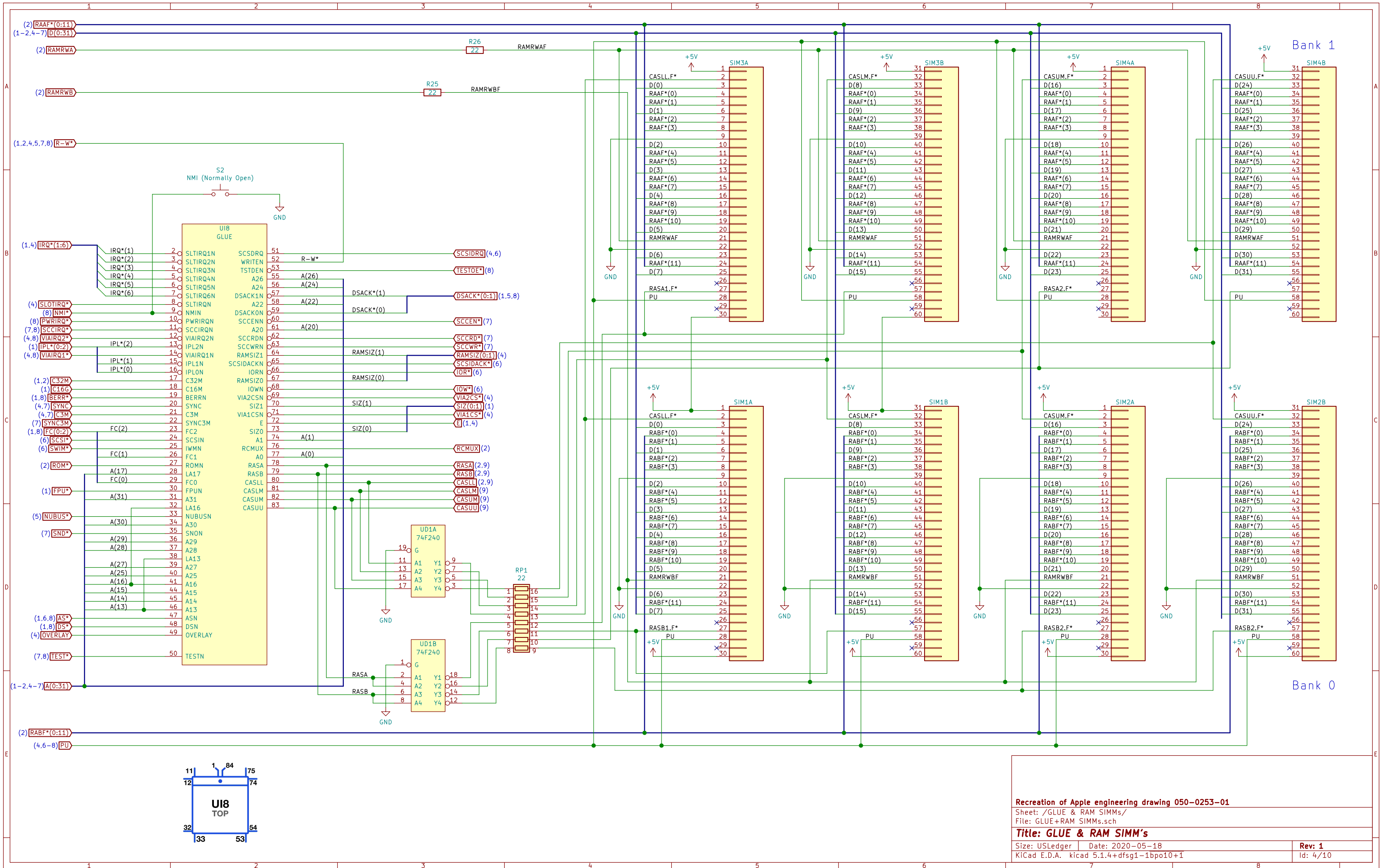
**Title: ROM & RAM Address Muxes**

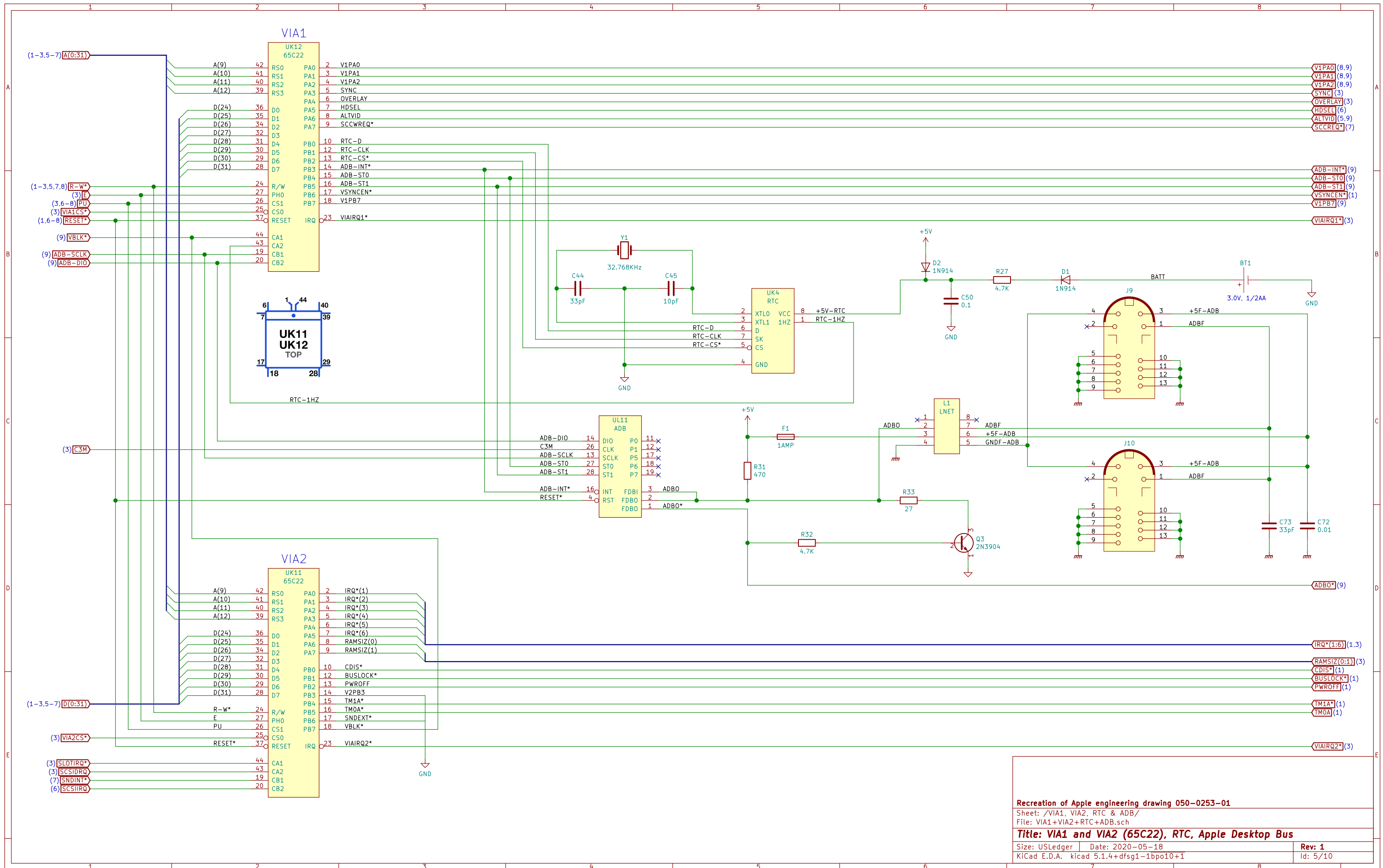
Size: USLedger Date: 2020-05-25

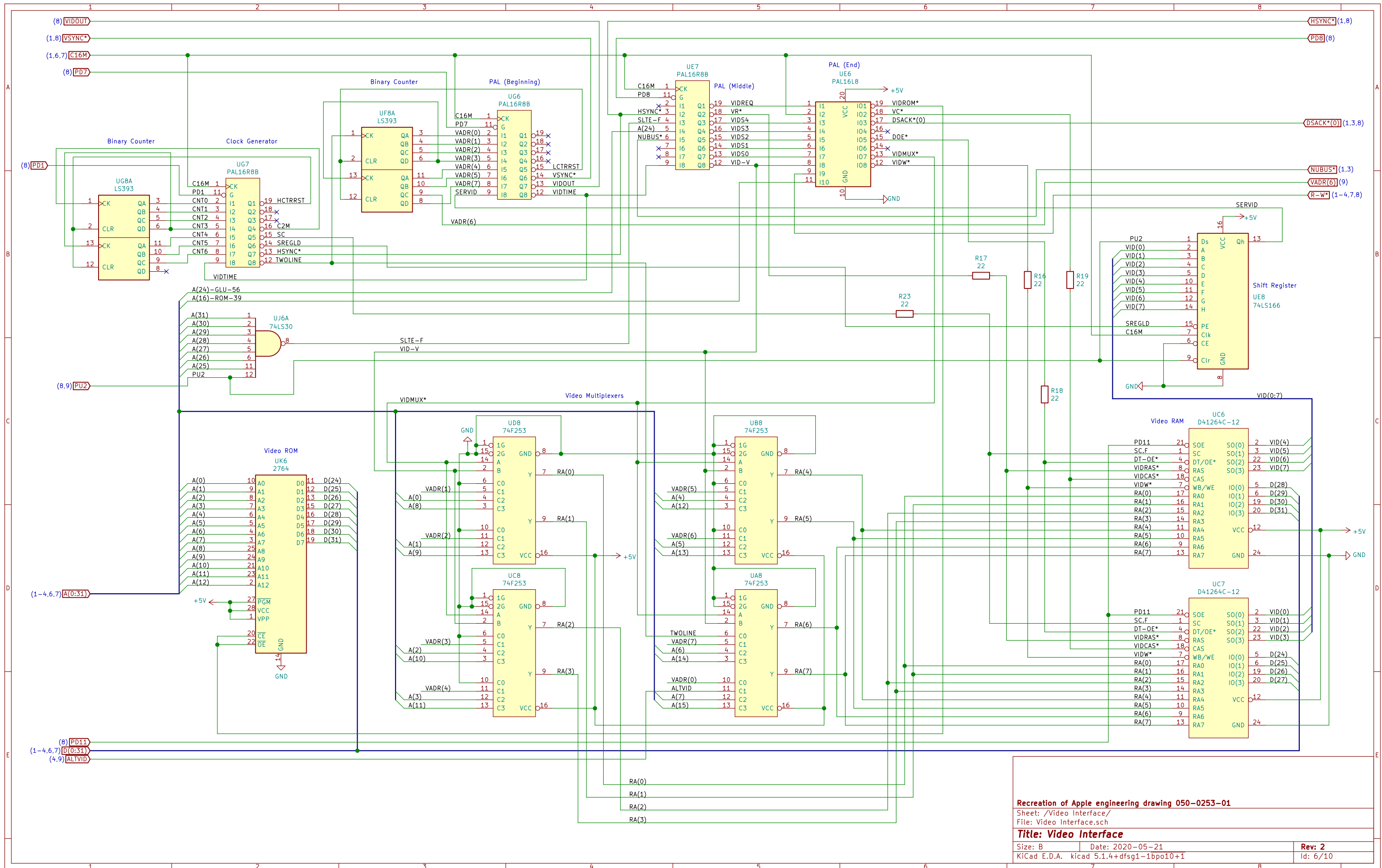
KiCad E.D.A. kicad 5.1.4+dfsg1-1bpo10+1

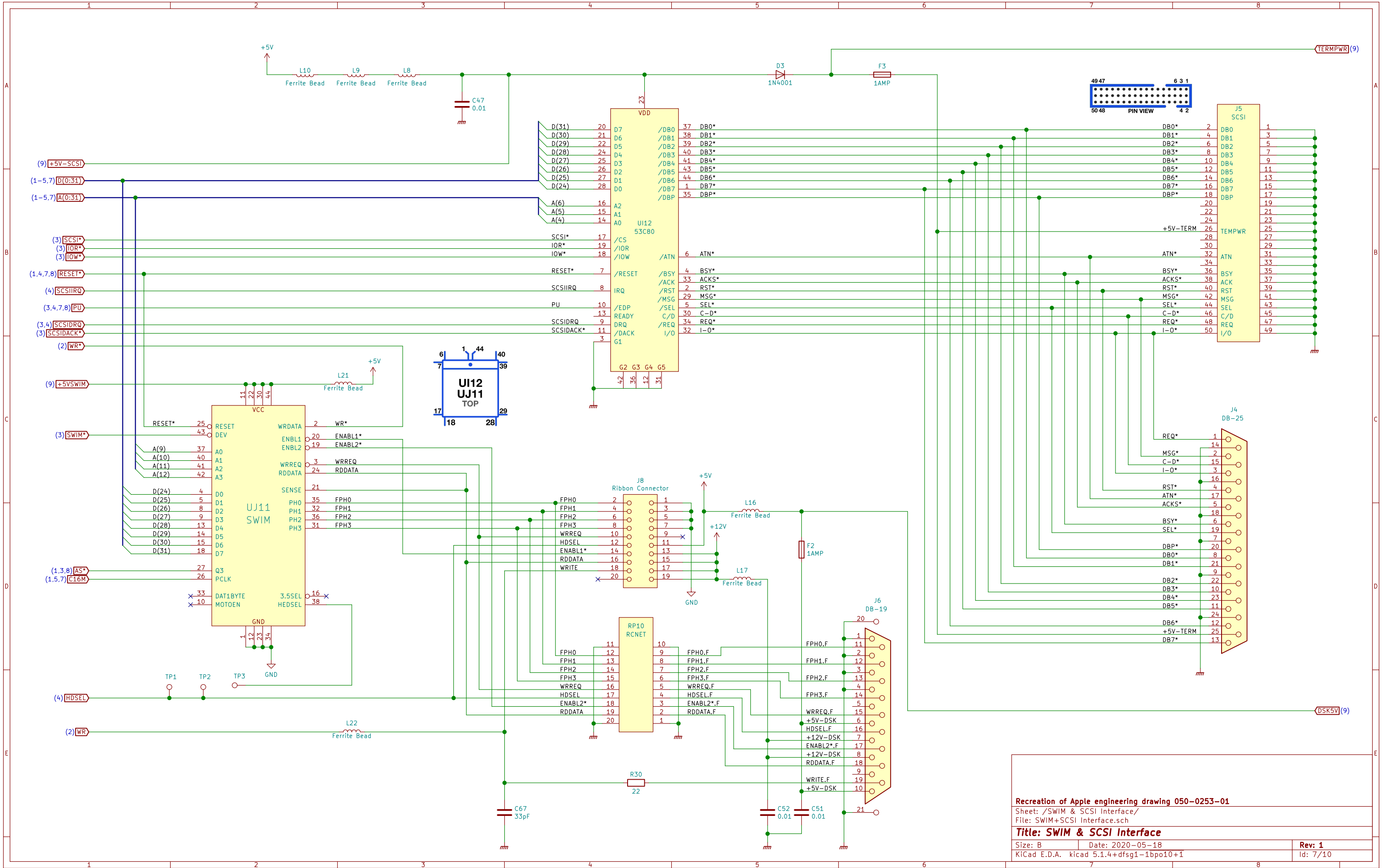
Rev: 3

Id: 3/10



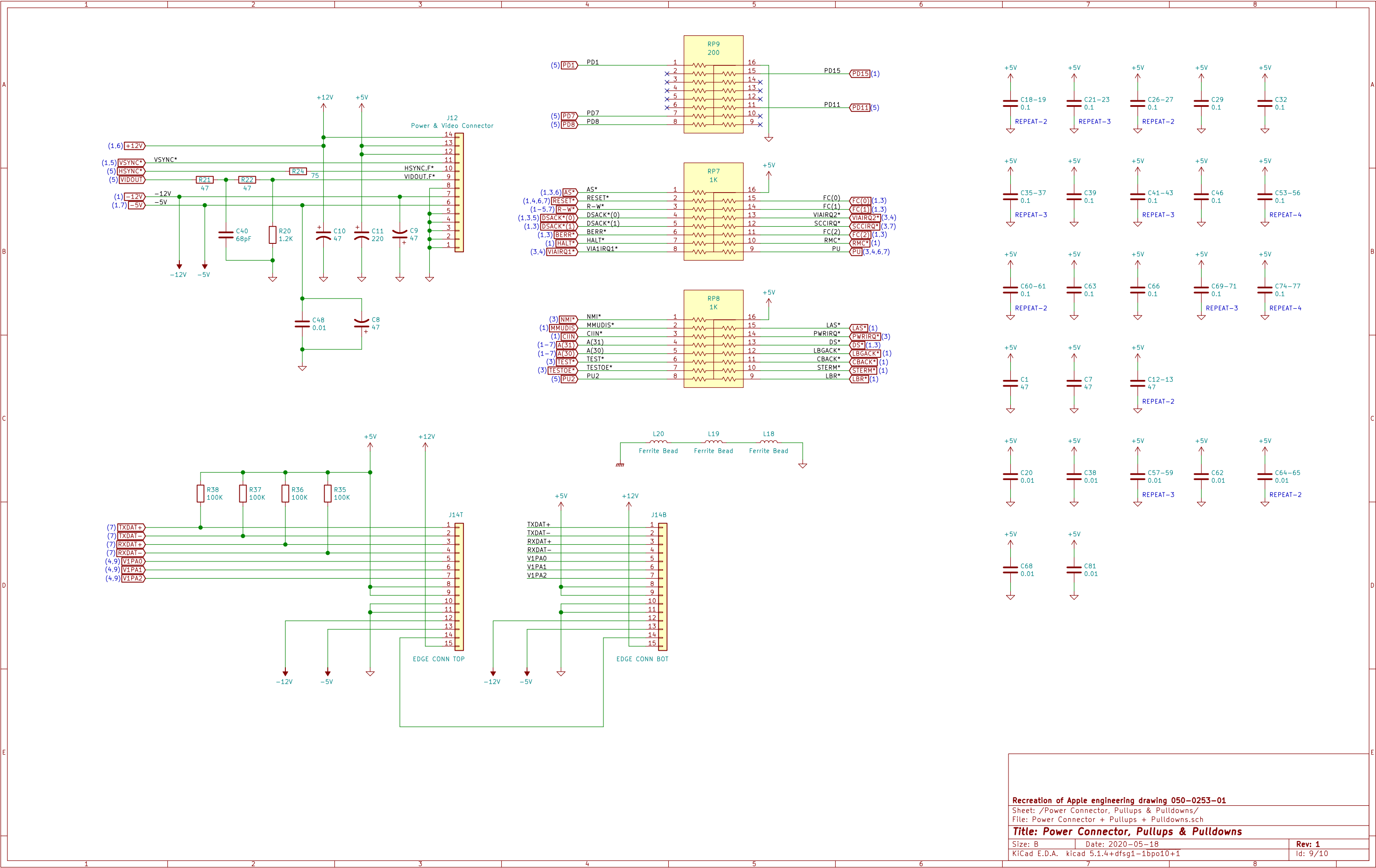












Recreation of Apple engineering drawing 050-0253-01

Sheet: /Power Connector, Pullups & Pulldowns/  
File: Power Connector + Pullups + Pulldowns.sch

Title: Power Connector, Pullups & Pulldowns

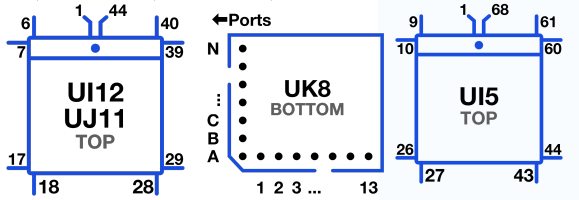
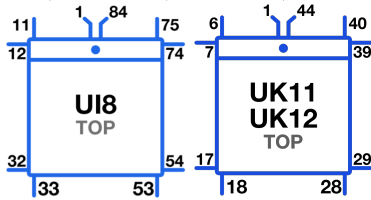
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|---|------------------|----------|
| Size: B                                 | Date: 2020-05-18 | Rev: 1   |
| KiCad E.D.A. kicad 5.1.4+dfsg1-1bpo10+1 |                  | Id: 9/10 |



|   |  |   |   |   |   |   |   |
|---|--|---|---|---|---|---|---|
| 1 | 2  | 3 | 4 | 5 | 6 | 7 | 8 |
| A | <div>This page is referenced in the other drawings,<br/>but its contents are unknown. It was possibly a<br/>“bed of nails” flying probe schematic.</div>   |   |   |   |   |   | A |
| B |  |   |   |   |   |   | B |
| C |  |   |   |   |   |   | C |
| D |  |   |   |   |   |   | D |
| E | <div><div>Recreation of Apple engineering drawing 050-0253-01</div><div>Sheet: /<br/>File: SE:30 09 [Unknown].sch</div><div><div>Title: Unknown</div><div><div>Size: USLedgerDate: 2020-05-18</div><div>KiCad E.D.A. eeschema (5.1.5-0-10_14)</div></div><div>Rev: 1<br/>Id: 1/1</div></div></div> |   |   |   |   |   | E |
|   |  |   |   |   |   |   |   |
|   |  |   |   |   |   |   |   |
|   |  |   |   |   |   |   |   |
| 1 | 2  | 3 | 4 | 5 | 6 | 7 | 8 |

Macintosh SE/30 MLB Address Line Pin Matrix

| Address | ROM | UJ2<br>RAM Mux | UI2<br>RAM Mux | UI3<br>RAM Mux | UJ3<br>RAM Mux | UJ4<br>RAM Mux | UI4<br>RAM Mux | UI8<br>GLUE | UK12<br>VIA1 | UK11<br>VIA2 | UK6<br>Vid ROM | UA8<br>Video Mux | UB8<br>Video Mux | UC8<br>Video Mux | UD8<br>Video Mux | UJ11<br>SWIM | UG12<br>Serial | UE10<br>Sound | UK8<br>CPU | UI5<br>FPU | J13<br>PDS Slot |
|---------|-----|----------------|----------------|----------------|----------------|----------------|----------------|-------------|--------------|--------------|----------------|------------------|------------------|------------------|------------------|--------------|----------------|---------------|------------|------------|-----------------|
| A(0)    |     |                |                |                |                |                |                | 77          |              |              | 10             |                  |                  |                  | 4                |              |                | 41            | A2         |            | 116             |
| A(1)    |     |                |                |                |                |                |                | 74          |              |              | 9              |                  |                  |                  | 12               |              | 39             | 42            | C4         | 25         | 76              |
| A(2)    | 4   | 3,6            |                |                |                |                |                |             |              |              | 8              |                  |                  | 4                |                  |              | 37             | 43            | D13        | 24         | 36              |
| A(3)    | 5   | 2,5            |                |                |                |                |                |             |              |              | 7              |                  |                  | 12               |                  |              |                | 44            | D12        | 23         | 115             |
| A(4)    | 6   | 10,13          |                |                |                |                |                |             |              |              | 6              |                  | 4                |                  |                  |              |                | 1             | C13        | 22         | 75              |
| A(5)    | 7   | 11,14          |                |                |                |                |                |             |              |              | 5              |                  | 12               |                  |                  |              |                | 2             | C12        |            | 35              |
| A(6)    | 8   |                | 3,6            |                |                |                |                |             |              |              | 4              | 4                |                  |                  |                  |              |                | 3             | D11        |            | 114             |
| A(7)    | 9   |                | 2,5            |                |                |                |                |             |              |              | 3              | 12               |                  |                  |                  |              |                | 4             | B13        |            | 34              |
| A(8)    | 31  |                | 10,13          |                |                |                |                |             |              |              | 25             |                  |                  |                  | 3                |              |                | 7             | B12        |            | 113             |
| A(9)    | 32  |                | 11,14          |                |                |                |                |             | 42           | 42           | 24             |                  |                  |                  | 13               | 37           |                | 8             | C11        |            | 73              |
| A(10)   | 33  |                |                | 3,6            |                |                |                |             | 41           | 41           | 21             |                  |                  | 3                |                  | 40           |                | 9             | A13        |            | 33              |
| A(11)   | 34  |                |                | 2,5            |                |                |                |             | 40           | 40           | 23             |                  |                  | 13               |                  | 41           |                | 10            | C10        |            | 112             |
| A(12)   | 35  |                |                | 10,13          |                |                |                |             | 39           | 39           | 2              |                  | 3                |                  |                  | 42           |                |               | B11        |            | 72              |
| A(13)   | 36  |                |                | 11,14          |                |                |                | 46          |              |              |                |                  | 13               |                  |                  |              |                |               | A12        |            | 32              |
| A(14)   | 37  |                |                |                | 3,6            |                |                | 45          |              |              |                |                  |                  |                  |                  |              |                |               | B10        |            | 111             |
| A(15)   | 38  |                |                |                | 2,5            |                |                | 44          |              |              |                |                  |                  |                  |                  |              |                |               | A11        |            | 31              |
| A(16)   | 39  |                |                |                | 10,13          |                |                | 41          |              |              |                |                  |                  |                  |                  |              |                |               | B9         |            | 110             |
| A(17)   | 40  |                |                |                | 11,14          |                |                | 28          |              |              |                |                  |                  |                  |                  |              |                |               | A10        |            | 70              |
| A(18)   | 41  |                |                |                |                | 3,6            |                |             |              |              |                |                  |                  |                  |                  |              |                |               | C8         |            | 30              |
| A(19)   | 42  |                |                |                |                | 2,5            |                |             |              |              |                |                  |                  |                  |                  |              |                |               | A9         |            | 109             |
| A(20)   | 43  |                |                |                |                | 10,13          |                | 61          |              |              |                |                  |                  |                  |                  |              |                |               | B8         |            | 69              |
| A(21)   | 44  |                |                |                |                | 11,14          |                |             |              |              |                |                  |                  |                  |                  |              |                |               | A8         |            | 29              |
| A(22)   | 45  |                |                |                |                |                | 3,6            | 58          |              |              |                |                  |                  |                  |                  |              |                |               | B7         |            | 108             |
| A(23)   |     |                |                |                |                |                | 2,5            |             |              |              |                |                  |                  |                  |                  |              |                |               | A7         |            | 28              |
| A(24)   |     |                |                |                |                |                | 10,13          | 56          |              |              |                |                  |                  |                  |                  |              |                |               | A6         |            | 107             |
| A(25)   |     |                |                |                |                |                | 11,14          | 40          |              |              |                |                  |                  |                  |                  |              |                |               | B6         |            | 67              |
| A(26)   |     |                |                |                |                |                |                | 55          |              |              |                |                  |                  |                  |                  |              |                |               | A5         |            | 27              |
| A(27)   |     |                |                |                |                |                |                | 39          |              |              |                |                  |                  |                  |                  |              |                |               | B5         |            | 106             |
| A(28)   |     |                |                |                |                |                |                | 37          |              |              |                |                  |                  |                  |                  |              |                |               | A4         |            | 66              |
| A(29)   |     |                |                |                |                |                |                | 36          |              |              |                |                  |                  |                  |                  |              |                |               | B4         |            | 26              |
| A(30)   |     |                |                |                |                |                |                | 34          |              |              |                |                  |                  |                  |                  |              |                |               | A3         |            | 105             |
| A(31)   |     |                |                |                |                |                |                | 31          |              |              |                |                  |                  |                  |                  |              |                |               | B3         |            | 25              |



Macintosh SE/30 MLB Data Line Pin Matrix

| Address | ROM | D4<br>Diode | D5<br>Diode | D6<br>Diode | D7<br>Diode | D8<br>Diode | D9<br>Diode | D10<br>Diode | D11<br>Diode | D12<br>Diode | D13<br>Diode | D14<br>Diode | D15<br>Diode | D16<br>Diode | D17<br>Diode | D18<br>Diode | D19<br>Diode | S1A<br>RAM | S1B<br>RAM | S2A<br>RAM | S2B<br>RAM | S3A<br>RAM | S3B<br>RAM | S4A<br>RAM | S4B<br>RAM | UK12<br>VIA1 | UK11<br>VIA2 | UK6<br>VROM | UC6<br>VRAM | UC7<br>VRAM | UJ11<br>SWIM | UI12<br>SCSI | UG12<br>Serial | UE10<br>DSC | UK8<br>CPU | UI5<br>FPU | J13<br>PDS |
|---------|-----|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|----------------|-------------|------------|------------|------------|
| D(0)    | 14  | 1           |             |             |             |             |             |              |              |              |              |              |              |              |              |              |              | 3          |            |            |            | 3          |            |            |            |              |              |             |             |             |              |              |                |             | K13        | 3          | 13         |
| D(1)    | 15  |             |             | 1           |             |             |             |              |              |              |              |              |              |              |              |              |              | 6          |            |            |            | 6          |            |            |            |              |              |             |             |             |              |              |                |             | K12        | 2          | 93         |
| D(2)    | 16  |             |             |             |             | 1           |             |              |              |              |              |              |              |              |              |              |              | 10         |            |            |            | 10         |            |            |            |              |              |             |             |             |              |              |                |             | L13        | 1          | 14         |
| D(3)    | 17  |             |             |             |             |             |             | 1            |              |              |              |              |              |              |              |              |              | 13         |            |            |            | 13         |            |            |            |              |              |             |             |             |              |              |                |             | M13        | 68         | 54         |
| D(4)    | 18  |             |             |             |             |             |             |              | 1            |              |              |              |              |              |              |              |              | 16         |            |            |            | 16         |            |            |            |              |              |             |             |             |              |              |                |             | L12        | 67         | 94         |
| D(5)    | 19  |             |             |             |             |             |             |              |              |              | 1            |              |              |              |              |              |              | 20         |            |            |            | 20         |            |            |            |              |              |             |             |             |              |              |                |             | K11        | 66         | 15         |
| D(6)    | 20  |             |             |             |             |             |             |              |              |              |              |              |              | 1            |              |              |              | 23         |            |            |            | 23         |            |            |            |              |              |             |             |             |              |              |                |             | M12        | 65         | 55         |
| D(7)    | 21  |             |             |             |             |             |             |              |              |              |              |              |              |              |              | 1            |              | 25         |            |            |            | 25         |            |            |            |              |              |             |             |             |              |              |                |             | L11        | 64         | 95         |
| D(8)    | 22  | 2           |             |             |             |             |             |              |              |              |              |              |              |              |              |              |              |            | 3          |            |            |            | 3          |            |            |              |              |             |             |             |              |              |                |             | N13        | 62         | 16         |
| D(9)    | 23  |             |             | 2           |             |             |             |              |              |              |              |              |              |              |              |              |              |            | 6          |            |            |            | 6          |            |            |              |              |             |             |             |              |              |                |             | M11        | 60         | 96         |
| D(10)   | 24  |             |             |             |             | 2           |             |              |              |              |              |              |              |              |              |              |              |            | 10         |            |            |            | 10         |            |            |              |              |             |             |             |              |              |                |             | L10        | 59         | 17         |
| D(11)   | 25  |             |             |             |             |             |             | 2            |              |              |              |              |              |              |              |              |              |            | 13         |            |            |            | 13         |            |            |              |              |             |             |             |              |              |                |             | N12        | 58         | 57         |
| D(12)   | 26  |             |             |             |             |             |             |              |              | 2            |              |              |              |              |              |              |              |            | 16         |            |            |            | 16         |            |            |              |              |             |             |             |              |              |                |             | M10        | 57         | 97         |
| D(13)   | 27  |             |             |             |             |             |             |              |              |              |              | 2            |              |              |              |              |              |            | 20         |            |            |            | 20         |            |            |              |              |             |             |             |              |              |                |             | N11        | 56         | 18         |
| D(14)   | 28  |             |             |             |             |             |             |              |              |              |              |              |              | 2            |              |              |              |            | 23         |            |            |            | 23         |            |            |              |              |             |             |             |              |              |                |             | M9         | 55         | 58         |
| D(15)   | 29  |             |             |             |             |             |             |              |              |              |              |              |              |              |              | 2            |              |            | 25         |            |            |            | 25         |            |            |              |              |             |             |             |              |              |                |             | N10        | 54         | 98         |
| D(16)   | 47  |             | 1           |             |             |             |             |              |              |              |              |              |              |              |              |              |              |            |            | 3          |            |            |            | 3          |            |              |              |             |             |             |              |              |                |             | N9         | 50         | 19         |
| D(17)   | 48  |             |             |             | 1           |             |             |              |              |              |              |              |              |              |              |              |              |            |            | 6          |            |            |            | 6          |            |              |              |             |             |             |              |              |                |             | M8         | 49         | 99         |
| D(18)   | 49  |             |             |             |             |             | 1           |              |              |              |              |              |              |              |              |              |              |            |            | 10         |            |            |            | 10         |            |              |              |             |             |             |              |              |                |             | N8         | 48         | 20         |
| D(19)   | 50  |             |             |             |             |             |             |              | 1            |              |              |              |              |              |              |              |              |            |            | 13         |            |            |            | 13         |            |              |              |             |             |             |              |              |                |             | N7         | 47         | 60         |
| D(20)   | 51  |             |             |             |             |             |             |              |              |              | 1            |              |              |              |              |              |              |            |            | 16         |            |            |            | 16         |            |              |              |             |             |             |              |              |                |             | M7         | 46         | 100        |
| D(21)   | 52  |             |             |             |             |             |             |              |              |              |              |              | 1            |              |              |              |              |            |            | 20         |            |            |            | 20         |            |              |              |             |             |             |              |              |                |             | N6         | 45         | 21         |
| D(22)   | 53  |             |             |             |             |             |             |              |              |              |              |              |              |              | 1            |              |              |            |            | 23         |            |            |            | 23         |            |              |              |             |             |             |              |              |                |             | M6         | 44         | 61         |
| D(23)   | 54  |             |             |             |             |             |             |              |              |              |              |              |              |              |              | 1            |              |            |            | 25         |            |            |            | 25         |            |              |              |             |             |             |              |              |                |             | N5         | 42         | 101        |
| D(24)   | 55  |             | 2           |             |             |             |             |              |              |              |              |              |              |              |              |              |              |            |            |            | 3          |            |            |            | 3          | 36           | 36           | 11          |             | 5           | 4            | 28           | 1              | 22          | M5         | 40         | 22         |
| D(25)   | 56  |             |             |             | 2           |             |             |              |              |              |              |              |              |              |              |              |              |            |            |            | 6          |            |            |            | 6          | 35           | 35           | 12          |             | 6           | 5            | 27           | 2              | 21          | N4         | 39         | 102        |
| D(26)   | 57  |             |             |             |             |             | 2           |              |              |              |              |              |              |              |              |              |              |            |            |            | 10         |            |            |            | 10         | 34           | 34           | 13          |             | 19          | 8            | 26           | 44             | 20          | N3         | 38         | 23         |
| D(27)   | 58  |             |             |             |             |             |             |              | 2            |              |              |              |              |              |              |              |              |            |            |            | 13         |            |            |            | 13         | 32           | 32           | 15          |             | 20          | 9            | 25           | 3              | 19          | M4         | 37         | 63         |
| D(28)   | 59  |             |             |             |             |             |             |              |              |              | 2            |              |              |              |              |              |              |            |            |            | 16         |            |            |            | 16         | 31           | 31           | 16          | 5           |             | 13           | 24           | 43             | 18          | N2         | 36         | 103        |
| D(29)   | 60  |             |             |             |             |             |             |              |              |              |              |              | 2            |              |              |              |              |            |            |            | 20         |            |            |            | 20         | 30           | 30           | 17          | 6           |             | 14           | 22           | 4              | 17          | M3         | 35         | 24         |
| D(30)   | 61  |             |             |             |             |             |             |              |              |              |              |              |              |              | 2            |              |              |            |            |            | 23         |            |            |            | 23         | 29           | 29           | 18          | 19          |             | 15           | 21           | 42             | 16          | L4         | 34         | 64         |
| D(31)   | 62  |             |             |             |             |             |             |              |              |              |              |              |              |              |              | 2            |              |            |            |            | 25         |            |            |            | 25         | 28           | 28           | 19          | 20          |             | 18           | 20           | 5              | 15          | N1         | 33         | 104        |

