

REDUCE R8 IF REQUIRED TO REDUCE RTC FURTHER

COLD JUNCTION COMPENSATION

REPLACE R22* BY 5K TRIMPOT THIS IS LIN POT P2

dashed line are jumpers

CALIBRATION METHOD

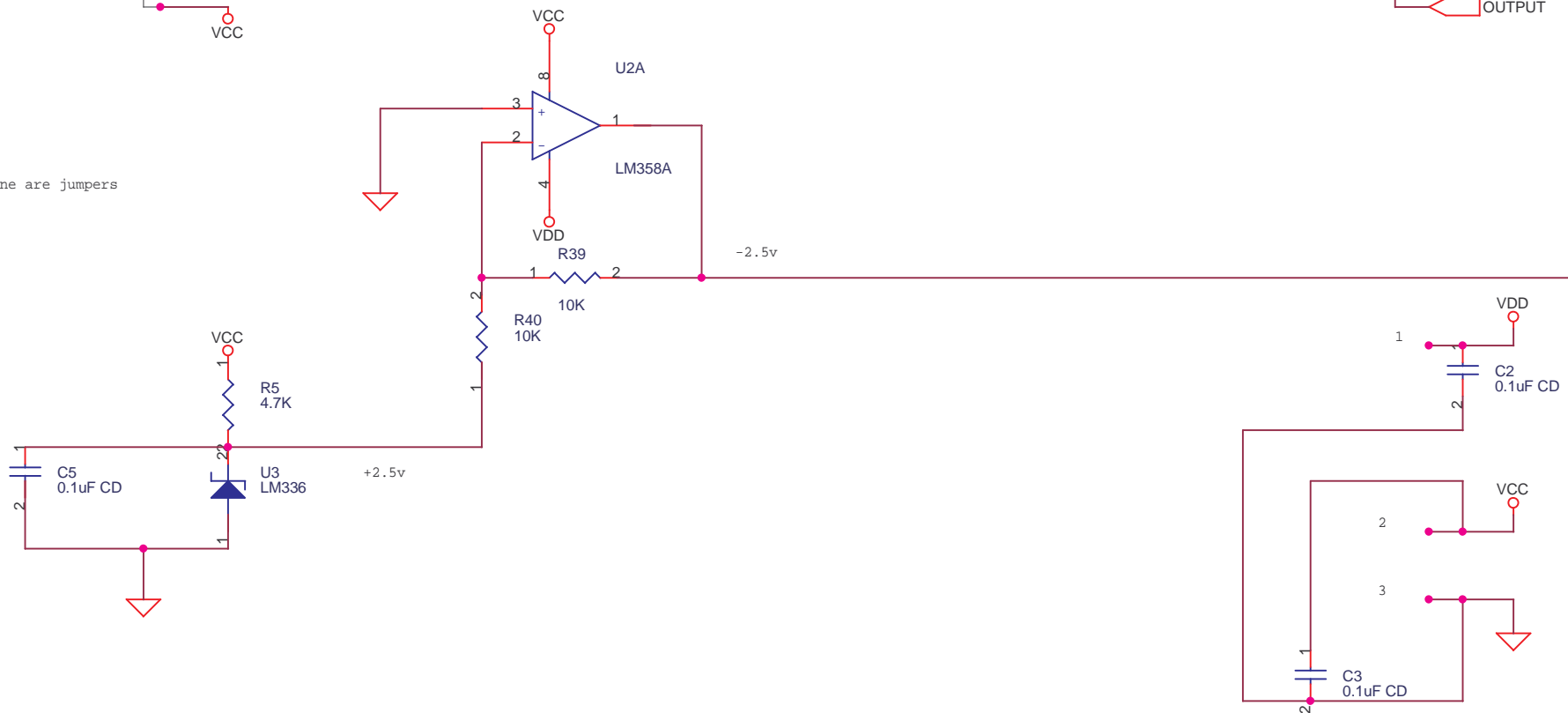
- ADJUST VREF PIN36 7107 TO 0.9V NOT 1.00V
- FEED 0MV ADJUST READOUT USING P1 RTC TO READ 25 DEG ROOM TEMP
- FEED 6.74MV ADJUST READING TO 700 +RT USING OP07 GAIN
- VERIFY ZERO OTHERWISE CARRY ON TRIMMING ZERO AND FS TILL ZERO READS ROOM TEMP AND FS READS 700 +RT
- FEED 18.84MV ADJUST P2 LIN POT TO GET 1600+RT

NOTES

- THE CIRCUIT HAS BEEN ADAPTED TO THE COMPONENTS USED BY YOU
- OP07 RF WAS 200K OP07 RI WAS 330E + 1K TRIMPOT
- OP07 OFFSET WAS 2X10K + 1K PRESET USE 10K PRESET FOR COARSE ACTION
- USE A 10 K OFFSET POT FOR OP07 IF RT SETTING POT P1 GOES OUT OF RANGE
- IK PRESET ABOVE CENTRE GOES TO VDD IE OFFSET POT

PERFORMANCE

- THIS CIRCUIT IS GOOD FROM 700 TO 1600
- THIS PROBE IS ONLY USED IN THE ABOVE GIVEN RANGE
- ACCURACY IN RANGE IS +/- 0.2 % +/- 2 DEG
- LINEARITY +/- 0.15% +/- 2 DEG
- ACCURACY BELOW 700 IS +/- 1% +/- 3 DEG
- LINEARITY +/- 1% +/- 4 DEG



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