nonlinearcircuits Divide & Conquer Build and BOM

This is a clock divider module containing 4 different dividers:

- 1. /2, /4, /8, /16, /32, /64, /128, /256
- 2. /1.5, /3
- 3. /2.5, /5
- 4. /3.5, /7

All sections will run off a signal patched into section 1.

The module can be patch-programmed to obtain other divisions. For example; patch output /2 into section 4 to get divide by 14 from the /7 output.

The circuit is CMOS based and contains no microprocessors.

In the BOM, part numbers for Tayda or Mouser are given as examples.

BOM

component	quantity	notes
4013	5	CMOS SOIC
4024	1	CMOS SOIC
4070	1	CMOS SOIC
3.5mm jack	18	Tayda A-2563
3mm LED	8	note – 3mm
LL4148 diodes	4	Mouser 512-LL4148
TL072	2	SOIC Tayda: A-1136
BC847	14	SOT23 Tayda: A-1339
VERS.3 - S1JL or similar	2	Mouser: 821-S1JL, dot=cathode
VERS,4 - SCHOTTKY		Mouser: 841-PMEG4010EGWX
Eurorack power connector	1	Tayda A-198
10uF	2	0805, 25V or higher voltage rating
100nF	7	0805
1k	28	0805
10k	6	0805
100k	10	0805
RL	8	0805 Select to suit LED brightness
10 Pin 2.54mm Single Row Pin Header Strip	4	Tayda: A-197
10 Pin 2.54mm Single Row Female Pin Header	4	Tayda: A-1306

note

Be careful to connect the top and bottom PCBs correctly. Make sure the '256' and '7' printed on the bottom corners of the PCBs and 'in & 'in' on the top 2 corners are lined up











