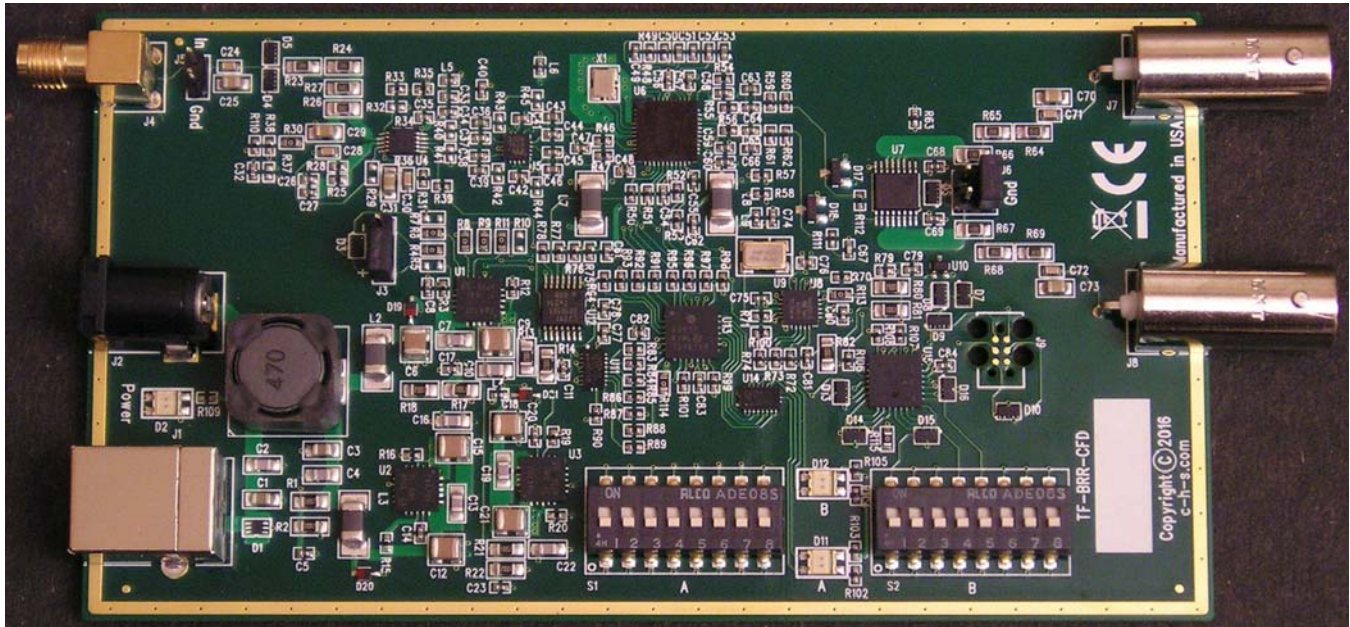


## TF-BRR-CFD

### BroadR-Reach Clock Frequency Divider Test Fixture



### Salient Features

- Facilitates BroadR-Reach, P802.3bw 100BASE-T1 and P802.3bp 1000BASE-T1 distortion tests
- Produces two identical clock signal outputs phase locked to the input clock
- SMA connector clock input, AC-coupled, 50 Ohm terminated, 50mVpp-5Vpp
- Supports input clock frequencies of 10 MHz, 25 MHz, 66.666667 MHz and 125 MHz (+/-1.1%), switch controlled
- Testpoint access for oscilloscope observation of the input clock
- Input clock 200 Hz low-pass jitter-rejection filter
- Output clock frequency equals the input clock frequency divided by 1, 5/2, 20/3 or 25/2, per input frequency selection (nominally 10 MHz output for all above-cited input frequencies)
- BNC connector clock output, AC-coupled, 50 Ohm back-terminated, 3.0, 3.3 or 4.2Vpp (50% less when far-end terminated), output amplitude jumper controlled
- Individual-buffer-produced or shared-buffer-produced outputs, jumper controlled
- LEDs flash orange for error conditions (including USB power input voltage out of range) or green for warnings (including loss of frequency lock)
- USB powered, requiring 4.5V-5.5V @ 450 mA
- Extended input frequency range of 64 KHz to 2 GHz available (optional capability)
- Extended output frequency range of 2 KHz to 200 MHz available (optional capability)
- Locked-frequency phase-locked-output functionality available (optional capability)
- Compact 5.00" x 2.75" x 0.70" (12,70 cm x 6,99 cm x 1,78 cm) printed circuit board

## TF-BRR-CFD Ordering Summary

- Part number TF-BRR-CFD includes hardware test fixture (power and connecting cables not included)
- Part number TF-BRR-CFD-XFR includes TF-BRR-CFD test fixture and adds extended input and output frequency ranges (all units), and locked-frequency phase-locked-output functionality (Rev 1 units only)
- Order part number TF-BRR-XFR to add XFR functionality to a TF-BRR-CFD in the field (extended input and output frequency ranges enabled on all units; locked-frequency phase-locked-output functionality enabled on Rev 1 units only)
- Currently-supported frequency configurations:

Frequency Configuration	Supported In Firmware Versions	Frequency Range	Nominal Input Frequency (MHz)	Division By	Nominal Output Frequency (MHz)
0	All	Basic	66.67	20/3	10
1	All	Basic	125	25/2	10
2	All	Basic	10	1	10
3	>=6	Basic	25	5/2	10

- Firmware updates can be produced upon request to allow about-to-be-purchased or extant units to support additional frequency configurations (basic frequency range: 10 MHz to 125 MHz input, with 10 MHz output; optional extended frequency range: 64 KHz to 2 GHz input, with 2 KHz to 200 MHz output)
- Contact CHS regarding installing firmware upgrades (not available in the field)

## Contact Crescent Heart Software

- Internet: [www.c-h-s.com](http://www.c-h-s.com); E-mail: [sales@c-h-s.com](mailto:sales@c-h-s.com); Telephone: (+1)503-232-2232
- Crescent Heart Software, a Tektronix® Embedded Systems Tools Partner, is headquartered in Portland, Oregon USA
- Information presented herein is subject to change without notice (datasheet Rev 7 (July, 2018): corrected table of Frequency Configurations above)