

From jimr@maia.usno.navy.mil Thu Jul 5 08:48:14 EDT 2001
Received: (from jimr@localhost)
by maia.usno.navy.mil (8.9.3 (PHNE_22672)/8.9.3) id IAA03417
for gpst; Thu, 5 Jul 2001 08:45:27 -0400 (EDT)
From: Jim Ray (USNO 202-762-1444)
Message-Id: <200107051245.IAA03417@maia.usno.navy.mil>
Subject: [GPST] Re: 5 MHz -> 20 MHz multiplier ?
To: gpst@maia.usno.navy.mil
Date: Thu, 05 Jul 2001 8:45:27 EDT
X-Mailer: Elm [revision: 212.5]
Status: RO

FYI, in response to the question:

Date: Tue, 3 Jul 2001 10:21:35 -0600 (MDT)
From: Kristine Larson
Subject: [GPST] 5 MHz -> 20 MHz multiplier ?

Hello.

We are starting an experiment here at the University of Colorado and plan to install an Ashtech Z12-T in Boulder for comparisons with other Z12-T's. We need a frequency multiplier to convert from 5 MHz to 20 MHz, and wondered if any of you could recommend a model and/or reliable supplier.

Thanks,
Kristine Larson
kristine.larson@colorado.edu

the following suggestions have been sent:

1. Date: Tue, 3 Jul 2001 13:18:33 -0700
From: "Christopher R. Ekstrom"

Hello,

I would recommend getting a module from SpectraDynamics (www.spectradynamics.com). This is a small company run by Franklin Ascrunz (spelling?) in Boulder. Franklin used to work with Fred Walls at NIST.

I am using his products and can attest to the excellent performance of multipliers from 5 to 100 MHz. These systems do not impact clock performance at the 1e-13 (at one second) level. His multipliers and distribution amplifiers do tend to use a fair amount of power.

I hope this helps,

Chris

Christopher R. Ekstrom
USNO - Time Service/Clock Development
3450 Massachusetts Ave. NW
Washington, D.C. 20392
(202) 762-0066 (phone)
(202) 762-1421 (fax)

2. Date: Tue, 03 Jul 2001 15:38:26 -0400
From: Miranda Chin
CC: Shepherd Cofer ,

Kristine,
Hopefully the information from Shep Cofer is helpful to you.
Miranda

Shepherd Cofer wrote:

> Yes we do! The Wavetek 178 50Mhz Programmable Waveform Synthesizer
> will accept an external reference and produce an output of up to 50Mhz,
> with the stability of the input.

3. Date: Thu, 05 Jul 2001 09:24:26 +0000
From: Thomas Schildknecht

Hello Kristine,

We use a frequency multiplier made by the Swiss Fedeal Office of Metrology (METAS) which is based on a design by LPTF Paris. You should contact Gregor Dudle from METAS for the details (Gregor.Dudle@eam.admin.ch).

Best regards,

Thomas

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4. From: =?iso-8859-1?Q?G=E9rard_Petit?=
Date: Thu, 5 Jul 2001 13:54:10 +0200

Kristine,
Our 5 MHz to 20 MHz multiplier has been provided
(at a charge) by OFMET (now METAS) in Bern, the designers of the
GeTT station. Contact: Gregor.Dudle@metas.admin.ch

Best wishes,
Gérard

Gerard Petit
Time section, BIPM
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 92312 Sevres FRANCE
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FAX: (33)1-45077059
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