

<http://groups.google.com/d/topic/comp.dcom.modems/gA5a9ugoWcM/discussion>

comp.dcom.modems >

Telebit registers

9 posts by 9 authors

Ed Wells

5/21/89

After calling another Telebit modem in PEP mode, have you ever gone back to local mode and checked out the S60's and S70's registers while the connection was connected? I did and found what appears to be several line/carrier condition tables with the grade of each of the 511 carriers.

I tried making a local call several times to the same number and noticed that each time I found small differences in these numbers (I assume the line sampled slightly differently each time).

For those hacker types, you may want to try to obtain exactly what type of connection you have on your long distance calls. I don't know, but Telebit themselves may actually be interested in this information for modem evaluation.

No matter what these numbers come up with, I'm very happy with my Telebit modem. This still appears to be the Cadillac of the 19,200 baud modems.

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Russell Lawrence

5/24/89

In article <49@wells.UUCP>, edw@wells.UUCP (Ed Wells) writes:

> After calling another Telebit modem in PEP mode, have you ever gone  
> back to local mode and checked out the S60's and S70's registers while  
> the connection was connected? I did and found what appears to be  
> several line/carrier condition tables with the grade of each of the 511  
> carriers.

^^^^  
Could someone please post how-to info on interpreting the table? I've tried checking the contents of register 76, but what I get is a listing that varies from eight numbers to about a hundred... \*not\* 511.

BTW, Ed mentioned in a previous article that he was unable to get his TB+ to work faster than 9600 on outgoing calls. My uucico supports 19.2 kbs calls, but I've never (ever) been able to get a throughput of more than 700 bytes per second. One of my net neighbors thinks the problem might be line noise, but I'm beginning to suspect that something else is wrong. If anyone else has encountered a similar problem, how about sharing the solutions?

--

Russell Lawrence, WP Group, New Orleans (504) 443-5000  
uunet!wpg!russ

George Robbins

5/25/89

In article <1182@wpg.UUCP> russ@wpg.UUCP (Russell Lawrence) writes:

> In article <49@wells.UUCP>, edw@wells.UUCP (Ed Wells) writes:  
>

> BTW, Ed mentioned in a previous article that he was unable to get his  
> TB+ to work faster than 9600 on outgoing calls. My uucico supports  
> 19.2 kbs calls, but I've never (ever) been able to get a throughput  
> of more than 700 bytes per second. One of my net neighbors thinks

> about sharing the solutions?

Are you sure your neighbor isn't running with an interface rate set to 9600 baud, either via "fixing" the baud rate with the S-registers or letting the "incoming" baud rate default to the speed at which he last talked to the modem?

This is a "problem" I've seen a couple of times, it's really not obvious what the TB's are up to, since they will automatically do baud rate adaption. The numbers are a clue though, since 700 char/sec is in the ball park thrupt you get at a 9600 baud interface rate.

--  
George Robbins - now working for, uucp: {uunet|pyramid|rutgers}!cbmvax!grr  
but no way officially representing arpa: cbmvax!g...@uunet.uu.net  
Commodore, Engineering Department fone: 215-431-9255 (only by moonlite)

Henry Spencer

5/25/89

In article <1182@wpg.UUCP> russ@wpg.UUCP (Russell Lawrence) writes:

>Could someone please post how-to info on interpreting the table? I've  
>tried checking the contents of register 76, but what I get is a listing  
>that varies from eight numbers to about a hundred... \*not\* 511.

Sure you aren't losing some of them because of lack of flow control on the line between modem and host? It's really easy to drop a chunk of stuff when you ask a TB for something like a register listing and your host can't keep up with full-blast input.

--  
Van Allen, adj: pertaining to | Henry Spencer at U of Toronto Zoology  
deadly hazards to spaceflight. | uunet!attcan!utzoo!henry he...@zoo.toronto.edu

Bill Mayhew

5/26/89

The line status registers (S70 .. S78) are indeed documented as follows in the manual. In case of misplaced manuals, they are:  
S70 Instantaneous Transmit Rate. Outbound raw bit rate, not necessarily the actual throughput.

S71 Transmit Bits Per Channel. Reports number of bits currently in use for all 511 carriers. Read only.

S72 Instantaneous Receiver Rate. Inbound raw bit rate, not necessarily the actual throughput.

S73 Receive Bits Per Channel. Reports number of bits currently in use for all 511 carriers. Read only.

S74 Received Packets Retransmitted. Number of received packets requiring retransmission since start of this call. Read only.

S75 Packets Accepted. Number of good packets received since current call began. Read only.

S76 Equivalent Line Noise Profile. CNR to the nearest 1/10th dBm at all 511 frequency points. Read only. Now this is definitely a cool register!

S77 Frequency Offset. Observed frequency offset of the communications channel in Hz. to the nearest 1/16 for the current connection. Valid for either PEP or regular connection.

S78 Slow Mode Line Quality. Merit figure 0 .. 100. 50 or higher means that the line will support acceptable communication. Redialing is recommended if you have a merit of less than 30.

Bill  
wtm@impulse.UUCP

Jean-Pierre Radley

6/1/89



> 38,400 are based on sending data which is highly compressible. If the  
> data is already compressed, their throughput goes WAY down.  
>  
> Please check you facts.

i can't speak for all high-speed modems, but my old HSTs routinely got  
~1100 c/s on already compressed files, and my new HSTs (50% faster) get  
over 1600.

Daniel A. Graifer

6/6/89

High Speed transfers (was: Tele

I have a pair of Prime EXLs that were running ATT SysV 3.0 hdb uucp over  
TB+ long distance (VA to CA) and routinely achieving 1400cps. Recently,  
the VA machine was upgraded to 3.1, and uucico at 19,200 stopped working. I  
can only get garbage unless I slow down to 9600. This is true when I call  
uunet as well. Prime says they are aware of this, but cannot tell me why.  
Anybody have any ideas what they broke in this release? FYI, 3.1 was the  
release of "Network Support Utilities" and the routing of everything thru  
STREAMS.

Thanks in advance.

Dan

(Note, use address below, "Reply" may not work.)

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