Application Note #174:

Caller ID Feature For CH1786A, CH179XA and CH2056A Modems

INTRODUCTION
This application note provides several detailed examples using the **+VCID** and **+VRID** Caller ID (CID) commands and associated options. While not exhaustive, these examples are intended to provide our customers with first hand knowledge of Cermetek's modem CID capabilities.

IMPORTANT NOTE

To use the Caller ID feature of the Cermetek modems, the user must subscribe to a CID service provided by their local PSTN. The CID feature will report the NULL STRING if the CID service is not activated by the local PSTN.

OVERVIEW
The following is an overview of the CID commands and their syntax. Refer to Cermetek document # 613-0001, <u>AT Commands and S-Registers,</u> for a complete description of the **+VCID** and **+VRID** command parameters.

+VCID=n Command. This command controls presentation of CID data when the HS modem is in the process of receiving an incoming call. The CID data is presented to the DTE between the first and second incoming rings. Data is only presented during the incoming call. To become active, the **+VCID=n** command must be followed by either the **&W0** or the **&W1** command, depending on whether the user specified **&Y0** or **&Y1** as the start-up active profile parameter.

Example 1A. Enable CID reporting during the incoming call. The active profile specified upon startup is **&Y0**.

Enter: **AT+VCID=1&W0<CR>**   Enable CID data presentation as formatted pairs.
Result: **OK<CR><LF>**

+VRID=n Command. This command controls presentation of CID data after the HS Modem has processed the incoming call. The CID data is presented to the DTE whenever the **+VRID=n** command is executed.

Example 1B. Report CID information from last received CID incoming call.

Enter: **AT+VRID=0<CR>**   Report CID data from most recent call as formatted pairs.
Result: **Data stream**

CALLER ID (CID) EXAMPLES
The following CID examples illustrate various options supported by Cermetek modems for CID data presentation and reporting.

Example 2. Disable CID reporting during the incoming call (default). The active profile specified upon startup is **&Y0**. The Remote modem is set to answer after 3 rings (**ATS0=03**). The Remote modem's phone number is 408-555-1212. The Originate modem's phone number is 408-752-5000.

Enter: **AT+VCID=0<CR>**   Disable CID data presentation.
Result: **OK<CR><LF>**

Enter: **Incoming call received by modem**
Result: **RING <CR><LF>**
Result: **RING <CR><LF>**
Result: **RING <CR><LF>**
Result: **CONNECT 33600 <CR><LF>**

Example 3A. Enable CID reporting during incoming calls. Present data as formatted pairs. The active profile specified upon startup is **&Y0**. The Remote modem is set to answer after 3 rings (**ATS0=03**). The Remote modem phone's number is 408-555-1212. The Originate modem's phone number is 408-752-5000.

Enter:　　**AT+VCID=1&W0<CR>**　　　　Enable CID reporting as formatted pairs.
Result:　　**OK<CR><LF>**

Enter:　　**Incoming call received by modem**
Result:　　**RING <CR><LF>**
Result:　　**DATE = 0716<CR><LF>**　　　Date of CID information. Current year assumed.
　　　　　　TIME = 0930<CR><LF>　　　Time of CID information.
　　　　　　NMBR = 4087525000<CR><LF>　Identification of calling phone number.
　　　　　　NAME = CERMETEK<CR><LF>　Identification of caller.
Result:　　**RING <CR><LF>**
Result:　　**RING <CR><LF>**
Result:　　**CONNECT 33600 <CR><LF>**

Example 3B. Enable CID reporting during incoming calls. Present data as unformatted. The active profile specified upon startup is **&Y0**. The Remote modem is set to answer after 3 rings (**ATS0=03**). The Remote modem phone's number is 408-555-1212. The Originate modem's phone number is 408-752-5000.

Enter:　　**AT+VCID=2&W0<CR>**　　　　Enable CID reporting as formatted pairs.
Result:　　**OK<CR><LF>**

Enter:　　**Incoming call received by modem**
Result:　　**RING <CR><LF>**
Result:　　**80270108303731363039333020A34303837353235303136070F4345524D4554454B20202020202020**
　　　　　　<CR><LF>　　　　　　　CID unformatted data.
Result:　　**RING <CR><LF>**
Result:　　**RING <CR><LF>**
Result:　　**CONNECT 33600 <CR><LF>**

Example 4A. Report the most recently received CID information. Present data as formatted pairs.

Enter:　　**AT+VRID=0<CR>**　　　　　Report most recently received CID information as formatted pairs.
Result:　　**DATE = 0716<CR><LF>**　　　Date of CID information. Current year assumed.
　　　　　　TIME = 0930<CR><LF>　　　Time of CID information.
　　　　　　NMBR = 4087525000<CR><LF>　Identification of calling phone number.
　　　　　　NAME = CERMETEK<CR><LF>　Identification of caller.

Example 4B. Report the most recently received CID information. Present unformatted data.

Enter:　　**AT+VRID=1<CR>**　　　　　Report most recently received CID information as formatted pairs.
Result:　　**80270108303731363039333020A34303837353235303136070F4345524D4554454B20202020202020**
　　　　　　<CR><LF>　　　　　　　CID unformatted data.

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