



TECHNICAL BULLETIN # 105

Implications of Conferencing Enhancements on 56303 DSPs (MM-Series cards)

PIKA Technologies Inc., 20 Cope Drive, Kanata, Ontario, Canada, K2M 2V8

Ph: +1 (613) 591-1555 Fax: +1 (613) 591-9295

Date Issued: July 31st, 2001

Software Version: MonteCarlo 5.6 or greater

Product(s): PrimeNet MM and Daytona MM cards

Purpose: To clarify the differences between the two types of DSPs used on PIKA cards as they pertain to the DSP conferencing feature. This document describes one minor change the developers should be aware of and suggests techniques on tracking the availability of DSP resources.

Background Information

All current Pika telephony cards (Inline, Daytona and PrimeNet) use the Motorola 56156 DSP model and the next generation Pika cards, namely the MM series, utilize the more advanced 56303 model. The 5.6 version of the MonteCarlo driver (common to all Pika cards) was introduced in early year 2001 with the launch of the next generation Multi Media series of Pika cards. The MM series supports up to 32 conferencing resources per DSP. This is double the previous limit of 16 conferencing resources per DSP.

Implications and Recommendations

In the pre-5.6 versions of the MonteCarlo driver a define statement (*#DEFINE PK_VC_MAX_MEMBERS 16*) was provided in the *pk_vc.h* header file, denoting the maximum number of conferencing resources available per DSP at the time. However, such a constant has not been introduced for the new DSP used only with the MM series. Please note the following with regard to this change:

- All current customers may continue using this constant in their application with any of the Pika cards regardless of DSP types; however it may limit them to 16 conferencing resources per DSP, depending on how this constant value is utilized within the application.
- Although not recommended, developers may still choose to create and use a similar *define* in their application for the new DSP.
- The availability and quantity of any type of DSP resource is ultimately dictated by the resources made available on the DSP through *selecting resources* in *MCSetup* (or *MCDT* functions), within the limit of the DSP for any given resource type or types.
- Thus, it is recommended to query the DSP in real-time for resource availability rather than using any constant value which may not actually be a true representation of available resources.

DSP Resource Query Techniques

1. Use *PK_DSP_GetPortHandle* in combination with *PK_DSP_GetPortDesc* to get a description of what resources are selected on a DSP.
See the API Reference Guide for details on these two functions.
2. If using MCDT functions to select your DSP resources, simply keep track of your selections and pass the final values to your application.