### Spectrum DSPbits

### Dakar Errata

Release Date: 16 March 1999

Revision 1.01

Title: F5 Dakar blink example will only work on site A				
Database Id#	H/W	S/W	Version	Fixed?
	Component	Component		
#385		WinNT	v2.00	will fix in next
		SDK		release

## **Errata Description**

#### **Problem:**

The LED will not blink, if the blink.out file is loaded onto a TIM module on site B, C or D.

## **Solution:**

Only running the blink.out file form site A. The LED flashes with blink.out loaded on site A, because only site A has access to the PLX PCI9060 registers. Refer to the F5 Dakar Technical Reference Manual, doc #500-000353, section 5, PCI Bus Interface and view Table 5, Embedded C44 Memory Map.

**Title:** SDF and LDF files provided with the SDK examples is different from the ones created by Toolbox

Database Id#	H/W Component	S/W Component	Version	Fixed?
#290		WinNT	v2.00	will fix in next
		SDK		release

### **Errata Description**

#### **Problem:**

The SDF and LDF provided with the Dakar SDK reference the nodes as SITE. For example, the embedded processor is referenced as Board1:SiteA:Proc0

Toolbox references the nodes as NODE. For example, the embedded processor is Board1:NodeA:Proc0

When using toolbox to generate a new SDF, this file won't work with the examples, unless using the LDF generated by Toolbox.

#### **Solution:**

Whenever a SDF or LDF needs to be generated by Toolbox, generate both files. Ensure both LDF and SDF reference the nodes the same way.

<b>Title:</b> The examples fail if the SDF has incorrect settings.				
Database Id#	H/W	S/W	Version	Fixed?
	Component	Component		
#292		WinNT	v2.00	will fix in next
		SDK		release

# **Errata Description**

#### Problem:

When running the example with a wrong SDF, the example will not work and DSP code will not be loaded.

#### **Solution:**

A SDF is used to define the system's hardware configuration and to compute the loading path for all processors in the system.

For a detailed description and example of a SDF, see F5 Carrier Board User Guide, Section 6.4 Defining your system's Hardware Configuration, Section 10.2 How to Run the Example Program and Appendix C: System Definition file: Description and Examples.

**Title:** C4x\_Control function always returns ILLEGAL OPERATION when taking PCI as the value for resource parameter.

Database Id#	H/W Component	S/W Component	Version	Fixed?
#294		DSP SDK	v2.00	will fix in next release

## **Errata Description**

#### **Problem:**

F5 Dakar DSP SDK library missing an else statement and cause the C4x\_Control function always returns ILLEGAL OPERATION when taking PCI as the value for resource parameter

#### **Solution:**

Modify control.c (located in F5SDK\Dev\DSP\SRC\F5alib) by adding the missing else back as following:

#### ORIGINAL

```
/* Read PCI9060 mailbox
 */
if (GET_MAILBOX == Operation)
{
  if (8 > Flags)
    *(UINT32 *)Value = *(F5_PLXMAILBOX0_REG + Flags);
  else
    result = ILLEGAL_FLAGS;
}
```

#### **CORRECTION**

```
/* Read PCI9060 mailbox
   */
else if (GET_MAILBOX == Operation)
{
   if (8 > Flags)
       *(UINT32 *)Value = *(F5_PLXMAILBOX0_REG + Flags);
   else
      result = ILLEGAL_FLAGS;
}
```

Rebuild f5\_c4x.lib with Makefile.c4x (provided in f5sdk\dev\dsp\src\f5alib)

Replace the original f5\_c4x.lib (located in f5sdk\dev\dsp\lib & f5sdk\lib) with the new one.

<b>Title:</b> The PLX Interrupt control/Status register is not set by the C4x_Control function				
Database Id#	H/W	S/W	Version	Fixed?
	Component	Component		
#295		WinNT	v2.00	will fix in next
		SDK		release

## **Errata Description**

#### **Problem:**

The bit in the PLX Interrupt control/Status register which enables local DMA0 interrupts is not set in the C4x\_Control (INTERRUPTS, ...) function.

### **Solution:**

Adding the following lines to the application code allows the PLX DMA interrupt to work.

#define LOCAL\_DMA0\_INT\_ENABLE 0x00040000

/\* enable local DMA0 interrupts in Int control reg \*/
\*F5\_PLXINTCONTROL\_REHG |= LOCAL\_DMA0\_INT\_ENABLE;