


amfелtec™



PocketShark
SYSTEM MONITORING
and CRASH RECOVERY



PocketShark - for System Monitoring and Crash Recovery

This product family supports computer systems located in the office or in the field. This includes servers, embedded applications and IOT devices that must operate 24/7, without human interaction.

Our *Batteryless Loggers* can continuously record system & environmental data during the computer system's operation, and in the event of a system crash or power outage. This data is stored in non-volatile memory, and can be accessed or restored later – at any time and on any computer – for analysis. By incorporating such loggers, the fault-diagnostic process becomes significantly faster, or it simply becomes *possible to perform*.

Our *WatchDog Timers* can auto-reboot a computer system in case of hovering or system crash.

Expect all *PocketShark Family™* tools to

- significantly increase the reliability of your computer system
- operate at an industrial temperature range
- have a lifespan of over ten years

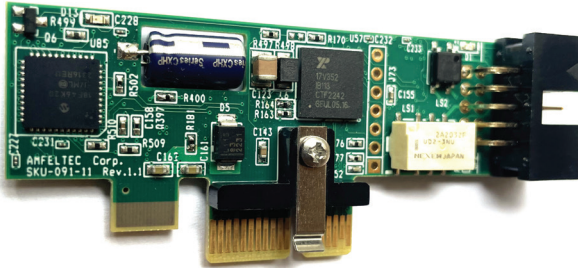
Example
of the Linux Kernel
panic message recorded by
the Logger

```
*Unable to handle kernel NULL pointer dereference at virtual address 0000000c
printing eip:
f89e568a
*pde = 32869001
*pte = 00000000
Oops: 0000
Kernel 2.4.9-31enterprise
CPU: 1
EIP: 0010:[<f89e568a>] Tainted: PF
EFLAGS: 00010096
*EIP is at _dign_setevmasK [streams-dignDriver] 0xe *
eax: 00000000 ebx: f65f5410 ecx: f5e16710 edx: f65f5410
esi: 0000lea0 edi: f5e23090 ebp: f65f5410 esp: f1cf7e78
ds: 0018 es: 0018 ss: 0018
Process pvcallmgr (pid: 10334, stackpage=f1cf7000)
Stack: 00000000 c01067fa 00000086 f1cf7e00 0000lea0 f5e23c30 f65f5410 f69e53ec
f89cd60 f5e16710 f5f5410 f65f5410 f8a5420 f1cf7e00 f8a4f7a 0000139e
f5e16710 f89cd60 00000086 f5e16710 f5e16754 f65f5410 0000034a f694e648
Call Trace: [setup_sigcontext+216/288] setup_sigcontext [Kernel] 0xda
Call Trace: [<c01067fa>] setup_sigcontext [Kernel] 0xda
[<f89e53ec>] dignput [streams-dignDriver] 0xb8
[<f89cd60>] Sm_Handle [streams-dignDriver] 0x1ea0
[<f8a54420>] intrdrv_lock [streams-dignDriver] 0x0
[<f8a4d73a>] Gn_MaxPm [streams-dignDriver] 0x8ba
[<f89cd60>] Sm_Handle [streams-dignDriver] 0x1ea0
[<f894e648>] llg_safe_putnext [streams] 0x168
[<f8a7b098>] __inmod_streams_dvbmDriver_S_bss_L117376 [streams-dvbmDriver] 0xbab [
[<f8a79f98>] dvwinit [streams-dvbmDriver] 0x2c0
[<f894e648>] llg_safe_putnext [streams] 0x168
[<f894e648>] llg_striputmsg [streams] 0x54c
[<f895482e>] __inmod_streams_S_rodota_L35552 [streams] 0x182e
[<f8951227>] sys_putmsg [streams] 0x6f
[system_call+15/35] system_call [Kernel] 0x33
[<c010715b>] system_call [Kernel] 0x33
Nov 28 12:17:58 talus kernel:
Nov 28 12:17:58 talus kernel:
Code: 8b 70 0c 8b 06 83 20 20 8b 54 24 20 8b 6c 24 24 76 1c 89 5c
```

SKU-091-10

IU

x1 PCIe Watchdog Timer

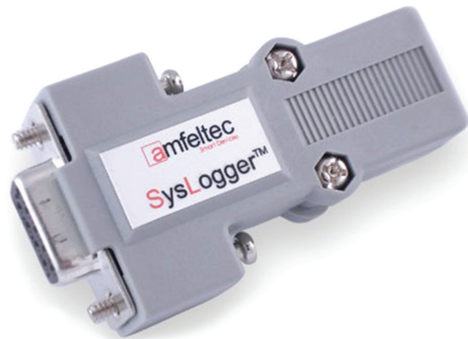


- Easy "Plug & Play" installation, no drivers needed
- Automatically reboots the computer, embedded appliance or IoT device in case of hovering or system crash
- 1U x1 PCIe board with PCIe retainer (no bracket needed); Dimensions: 65 mm x 30 mm
- Industrial temperature range
- Device lifetime over 10 years

SKU-004-01

RS-232

BatteryLess System Logger



- Easy "Plug & Play" installation, no drivers needed
- Interface: RS-232
- No batteries or external power required
- Industrial temperature range
- Records system information during normal operation and in the event of system crash or power outage
- Device lifetime over 10 years



USB Batteryless System Logger

SKU-091-31
SKU-091-32
SKU-091-33

- Easy “Plug & Play” installation, no drivers needed
- Records system & environmental information (temperature, air pressure, humidity, accelerometer) during normal operation and in the event of system crash or power outage
- Interface: USB-A, USB-C or USB header 5X2
- Industrial temperature range. Device lifetime over 10 years



SKU-091-31
USB Batteryless Logger connection
via USB-A connector



SKU-091-32
USB Batteryless Logger connection
via USB-C connector



SKU-091-33
USB Batteryless Logger connection
via standard USB 5X2 header

SKU-091-22

M.2 / USB

Batteryless System Logger

WatchDog Timer



- Easy "Plug & Play" installation, no drivers needed
- Records system & environmental information (temperature, air pressure, humidity, accelerometer) during normal operation and in the event of system crash or power outage
- Automatically reboots the computer, embedded appliance or IoT device in case of hovering or system crash
- Interface: USB 2.0 (A-key,B-key,E-key) (22 mm x 80 mm)
- Industrial temperature range. Device lifetime over 10 years

SKU-091-13

USB/RS-232

OEM Batteryless System Logger

WatchDog Timer



- Easy "Plug & Play" installation, no drivers needed
- Records system & environmental information (temperature, air pressure, humidity, accelerometer) during normal operation and in the event of system crash or power outage
- Automatically reboots the computer, embedded appliance or IoT device in case of hovering or system crash.
- Motherboard connection: via Samtec connector BKT-115-03-F-V-S
- Interface: USB 2.0 or RS-232
- Industrial temperature range. Device lifetime over 10 years



SKU-091-23

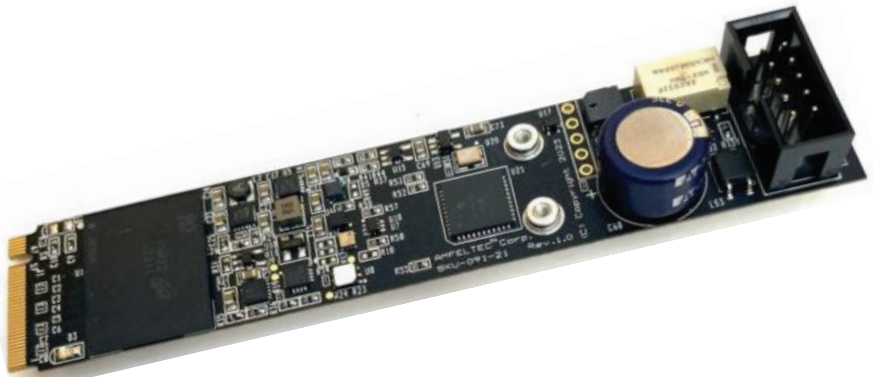
M.2 / USB

Batteryless System Logger

WatchDog Timer

SSD

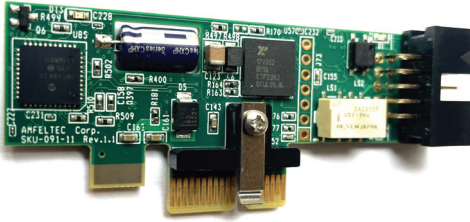
- Easy “Plug & Play” installation, no drivers needed
- Records system & environmental information (temperature, air pressure, humidity, accelerometer) during normal operation and in the event of system crash or power outage
- Automatically reboots the computer, embedded appliance or IoT device in case of hovering or system crash
- System storage: SSD



- Supports x4 PCIe Gen 3 and USB 2.0 (M-key) (22 mm x 110 mm)
- SSD storage capacity: 1 TB, 512 MB, 256 MB, 128 MB
- Extended industrial temperature range

SKU-091-11

1U PCIe WatchDog Timer with Logger



- Easy "Plug & Play" installation, no drivers needed
- Records system & environmental information (temperature, air pressure, humidity, accelerometer) during normal operation and in the event of system crash or power outage
- Automatically reboots the computer, embedded appliance or IoT device in case of hovering or system crash
- Board: 1U x1 PCIe board with PCIe retainer (no bracket needed); Dimensions: 65 mm x 30 mm
- Industrial temperature range. Device lifetime over 10 years

SKU-091-40

WatchDog Timer Power Adapter



- Directly connects to WatchDog Timer
- Galvanic isolated from WatchDog Timer
- Supply voltage 5V ± 10% via standard mini-USB connector or 3-pin header
- Connecting loads via screw terminal block: normally open & normally closed
- Maximum switching current: 10 A
- Maximum switching voltage: AC 250 V; DC 30 V

About Amfeltec Corp.

Amfeltec Corporation is a leading Canadian designer and manufacturer of complex and innovative electronics solutions based in Stouffville, Ontario. Amfeltec's product line spans a wide variety of computer hardware expansion products, telecommunication solutions, testing and production tools, with a focus on high-speed inter-connectivity technologies.

Since its incorporation in 2005, Amfeltec has served different customer segments, ranging from large multi-national corporations to governmental agencies, the defence industry, and electronics companies specializing in the development of high-performance custom-built computer systems. Amfeltec's multi-year industry experience, combined with engineering expertise, innovation track record and diverse product portfolio, makes the Company a solution provider of choice for many enterprises worldwide. Most of Amfeltec's products are covered by one or more United States patents.

Notable Amfeltec product families include Squid Carrier Board™, Piranha Analog Telecom™, Arowana PCIe SSD Board™, AngelShark Carrier Board™ and PocketShark Family™ for System Monitoring and Crash Recovery.

All Amfeltec products are designed and manufactured in Canada.



Designed and Manufactured in Canada

This product may be covered by one or more of the following U.S. patents:
7,186,145; 7,255,570; 7,537,491; 7,850,475; 7,908,504; 8,351,583; 8,483,364; 9,996,495;
10,481,660; 10,664,431.

Other U.S. patents pending

Amfeltec Corporation / 4129 Jesse Thomson Road
Stouffville / Ontario / L4A 3V5 / Canada
www.amfeltec.com