

PROC_CamSim™ 2.1

Camera  and Machine Simulator



The advertisement features the GIDEL logo with the slogan "think SPEED think GIDEL" and the text "CamSim www.gidel.com". A white seagull is shown flying over a blue background with white streaks. A copyright notice "(c) 1993 - 200" is visible at the bottom right of the ad.

The software interface, titled "PROC_CamSim", includes a table of parameters and a control panel. A large blue arrow points from the software window to the hardware components.

Parameter	Value
Bit Clock rate (MHz)	1000
PCAP	PROC_CamSim_PROC_CamSim
IRP	Camera_Link_CamSim
External Link Model	None
Link Model	None
Pixel Name Counter	C
Default J19	None
Camera Link Mode	None
Memory Size	1024 MB
Data Source	C:\Programme and Initialisatio...
File Name	None

Control Panel:

- Image source:
- Image Source button
- Frame width:
- Frame height:
- Repeat after (lines):
- Loop mode checkbox (checked)
- Start button
- Restart (without image load) button

STATUS: SYSTEM READY

Agenda

- PROC_CamSim Features
- PROC_CamSim GUI and operation
- PROC_CamSim API
- PROC_CamSim Sample Application

PROC_CamSim Features

Inputs:

- Formatted files: BMP24, PNG, JPEG, AVI.
- RAW data files:
 - Grayscale 8/16 bit format
 - RGB 24/48 bit format
- Load from memory (Generated by Application)
- External and Internal Triggering

PROC_CamSim Features

Outputs

- Frame or Line Scan Camera Simulation
- CameraLink Standard Outputs:
 - Grayscale 8/10/12/14/16 bit.
 - RGB 24/30/36 bit
- Unrolled or loop mode
- Multiple Taps with different Directions

Main Window – Information Display

The screenshot shows the PROC_CamSim software interface. It features a menu bar (File, About), a toolbar, and several tabs: Information display, Timing parameters, Camera Link parameters, and Pattern Generator. The Information display tab is active, showing a table of parameters and their values. To the right of the table is a small image window displaying a landscape scene. Below the table and image window are frame parameters and control buttons. Red arrows point from blue callout boxes to these specific elements.

Parameter	Value
GCLS(config file)	VPROC_CamSim.gcls
PCAF	PROC_CamSim_PROCellII.pcaf
RBF	\camsim_procell180.rbf
Expected FPS	194.64
Frames loaded	
HW frame counter	0
Output FPS	0.000
Current CL mode	Base
Memory size	4096 MB
Data source	C:\CamSimTest\Rgb24Bmp
Bit Per Pixel	RGB 24 bit

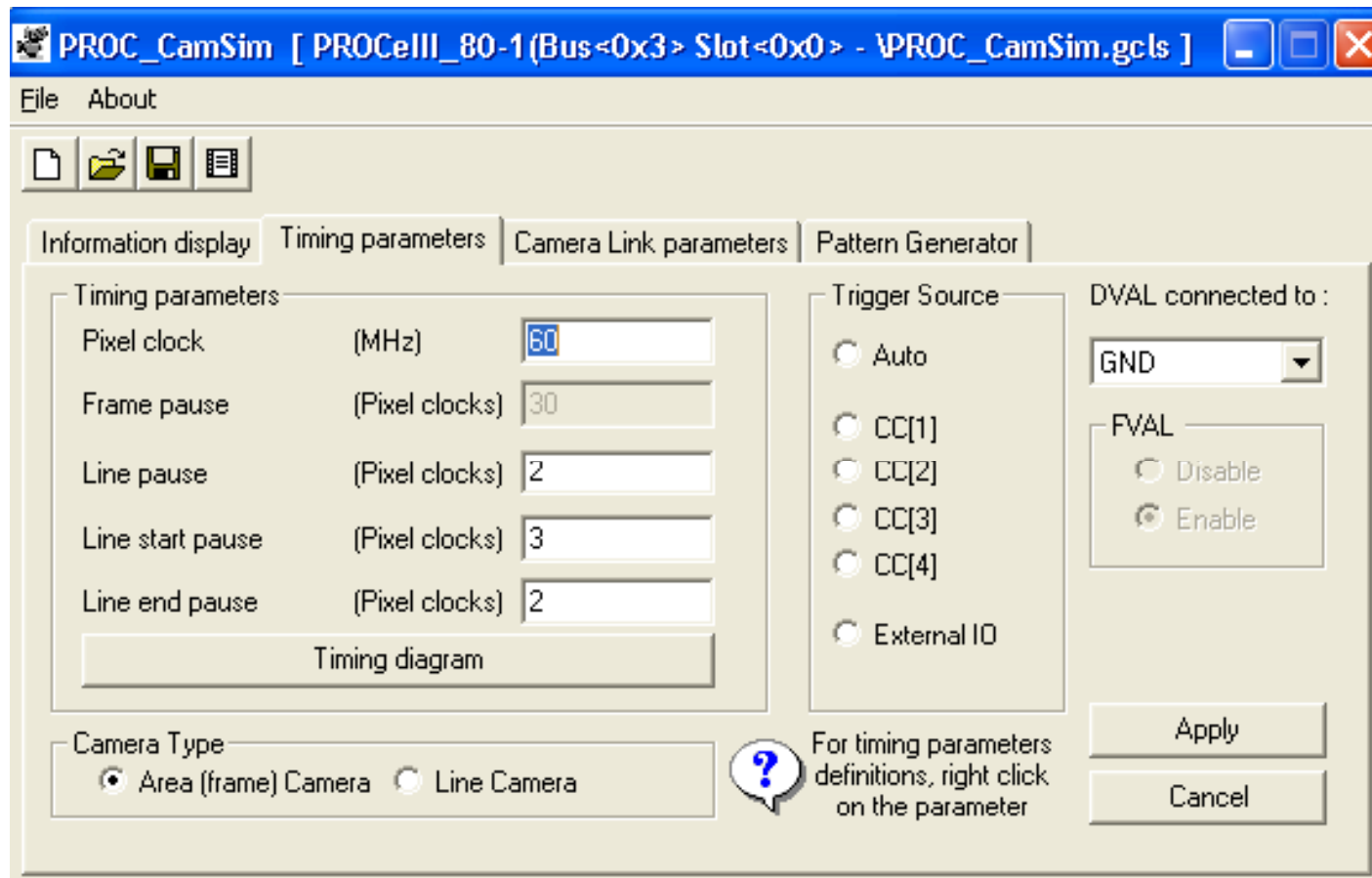
Information display

Image window

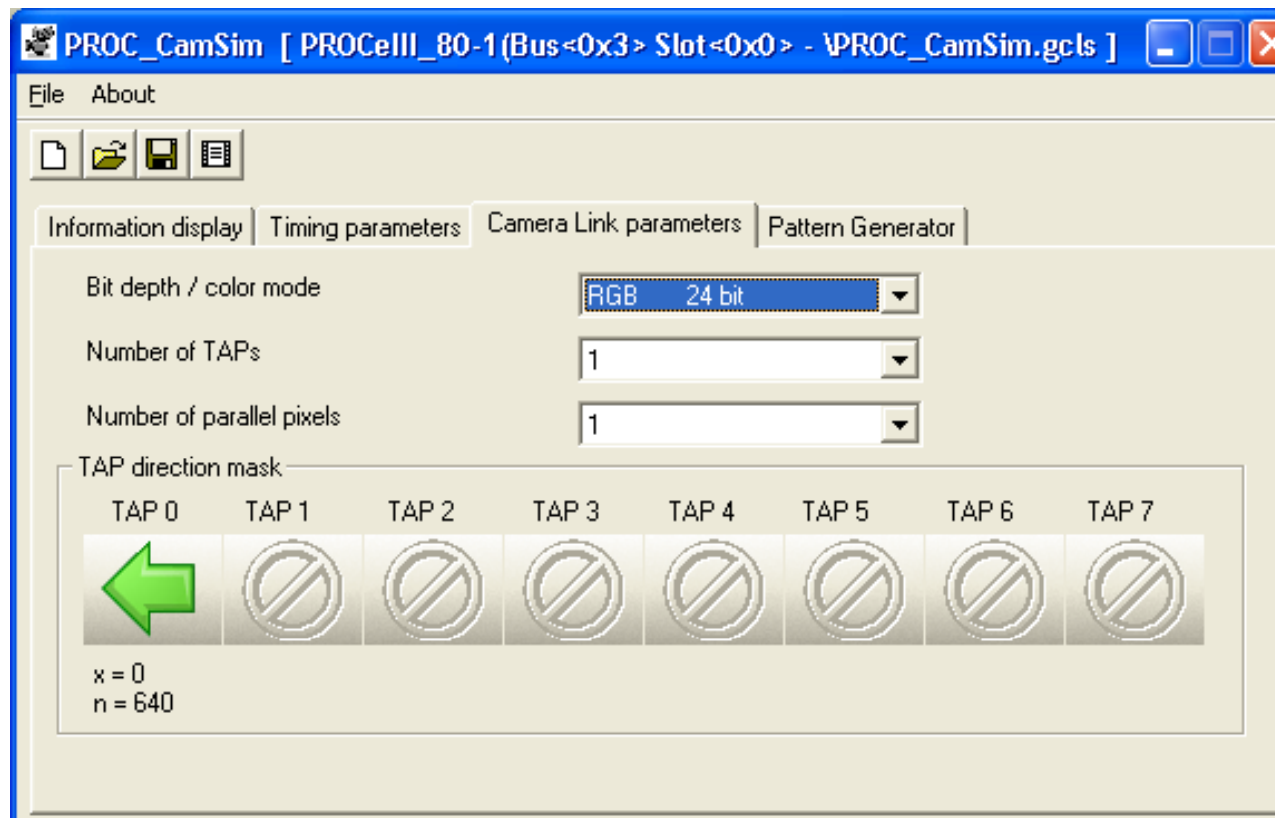
Frame source parameters

State and error info

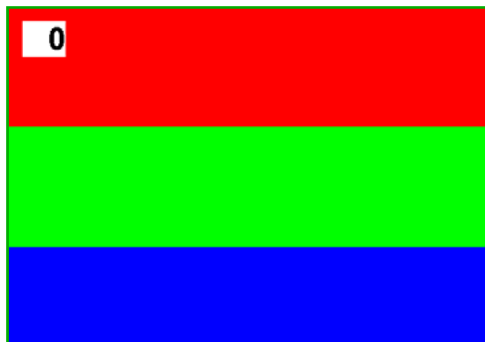
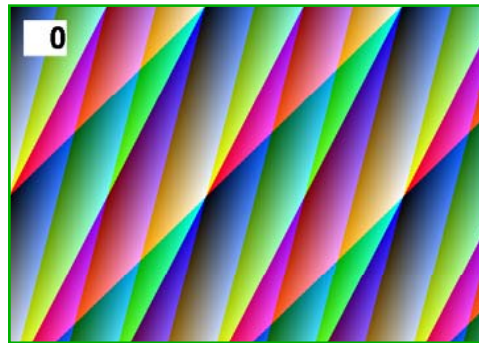
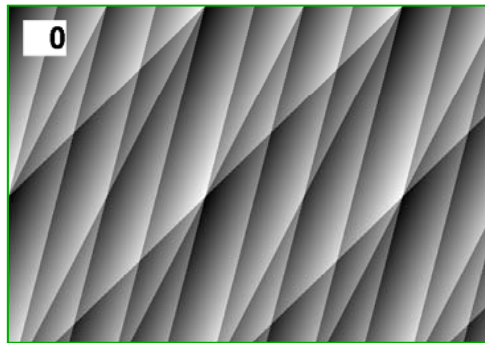
Camera Parameters



Pixel Parameters



Patterns Generation Options



PROC_CamSim API

- Provides complete system operation interface
- CamSim_API_Example provides a simple application, distributed with sources, uses about all API set
- This example could be simply investigated and modified for customer needs
- API is implemented in Gidel_CamSim.lib

CamSim Sample application

The screenshot shows the 'Untitled - CamSim_API_Example' application window. The main area displays the GIDEL logo and 'PROC CamSim'. The right side contains a 'Configuration' panel with fields for Frame Width, Frame Height, Bit depth, Input Type, and Raw format, along with checkboxes for 'Line Scan Camera' and 'Run in loop'. The bottom left has buttons for 'Load Config', 'Start', and 'Stop', and a 'Stop After frames counter' field. The bottom right has a 'Run Time Info' panel with fields for State, FPS, Loaded Frames, and Output Frames. Three red callout boxes with arrows point to the 'Load Config' button, the 'Start' button, and the 'Run Time Info' panel.

Configuration

- Frame Width
- Frame Height
- Bit depth
- Input Type
- Raw format
- Line Scan Camera
- Run in loop

Run Time Info

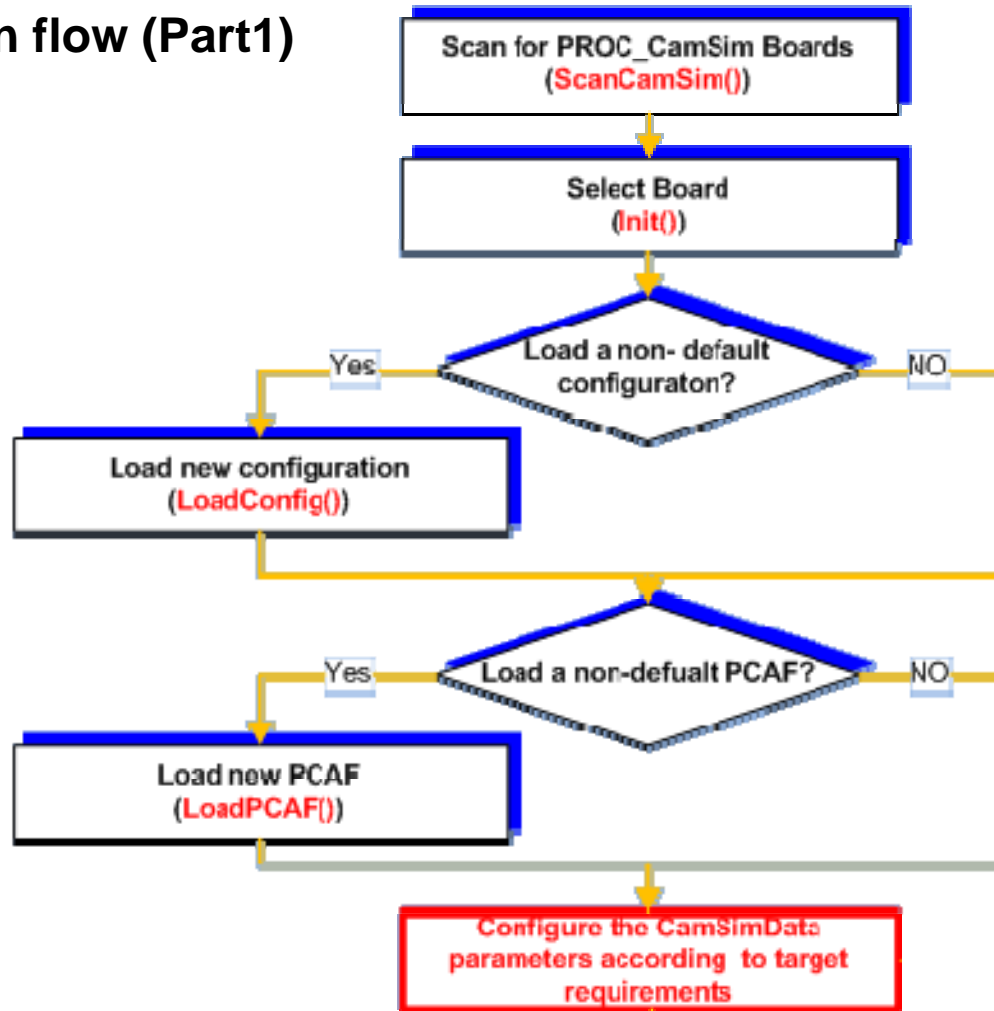
READY	State
0	FPS
0	Loaded Frames
0	Output Frames

Display Run Time State

Load Configuration

Start Output

Execution flow (Part1)



Execution flow (Part 2)

