

# TENTMAKER SYSTEMS

## PX WAVE DESIGN KIT

### PHILIPS PX1011A/XILINX SPARTAN 3

### PCI Express® x1 PROTOTYPE BOARD



#### FEATURES

- **Available Now US\$1800**
- Passed June 2005 PlugFest #45  
Compliance using *XILINX* LogicCORE IP (DO-DI-PCIE-PIPE)
- PCI-SIG® Integrators PCI Express® x1 add-in card
- Includes WinDriver™ PCI-Express Evaluation link – download *Jungo Software Technologies* cross platform driver development toolkit
- *Philips* PX1011A-EL1 PCI Express® PHY
- 4 Video A-D inputs
- 1MB SRAM
- I2C for video and external controls
- 2 Logic Analyzer Mictor Connectors
- Upto 4 XCF04VO20 Flash
- Standard: Spartan 3 XC3S1000FG676-5C.
- Upgrade Options: XC3S1500/2000/4000

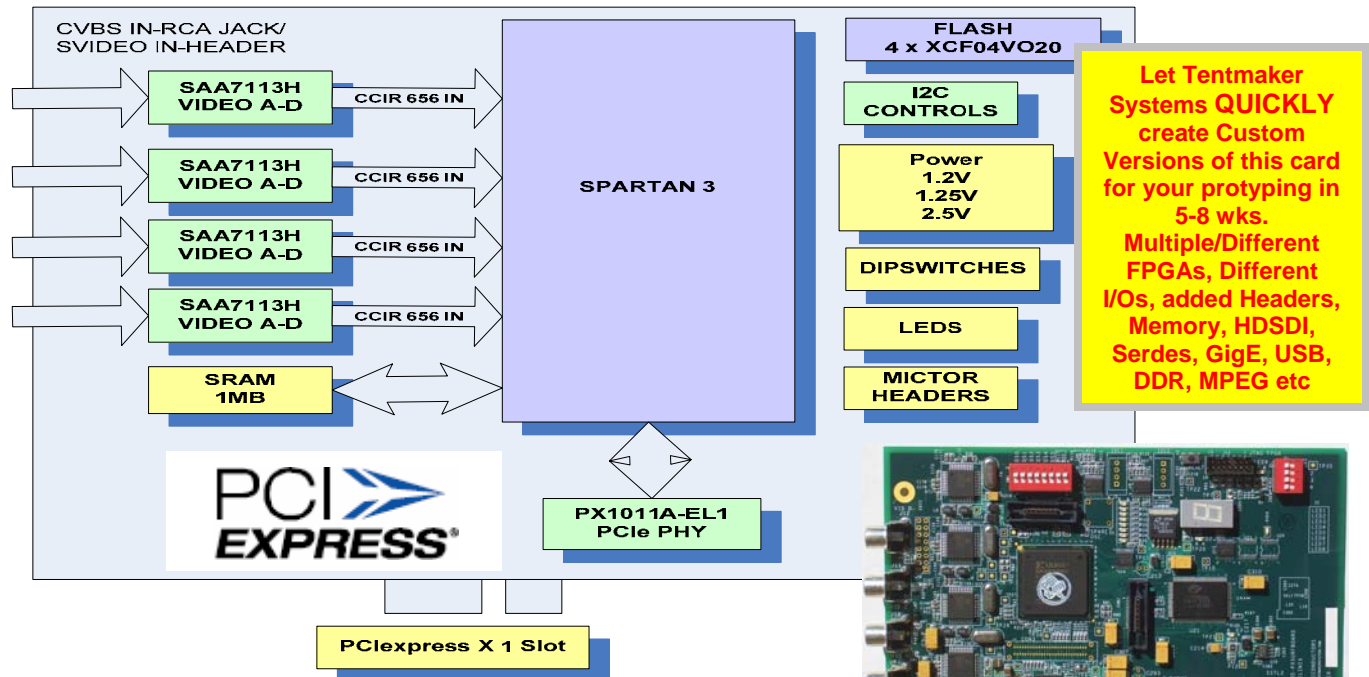
#### WHAT IS INCLUDED

- Board User Manual
- Printed Circuit Board
- Full Schematics
- Full Gerbers
- Full FPGA UCF
- Example Bitfile
- Note SW not included as it is dependant on the core you decide to use.
- Note Xilinx core must be licensed from Xilinx to modify it for your application.

#### APPLICATIONS

- Prototyping of PCI Express x1 MAC Cores
- Prototyping of RTL applications to work with PCI Express® Cores and PHY
- Analysis and Evaluation of PCI Express®
- Software and Driver Development

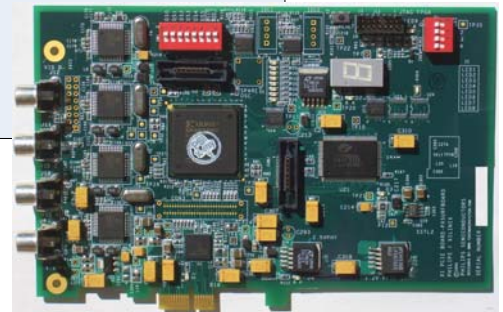
#### BLOCK DIAGRAM



#### CONTACT INFORMATION

Neil Mammen  
Tentmaker Systems

[sales@tentmakersystems.com](mailto:sales@tentmakersystems.com)  
[www.tentmakersystems.com](http://www.tentmakersystems.com)



TENTMAKER FPGA EXPERTS ARE ALSO AVAILABLE TO DESIGN AND IMPLEMENT YOUR CUSTOM RTL FOR THIS CARD.

# Tentmaker Systems Consulting Group

## Company Profile

Tentmaker Systems is a San Jose/Silicon Valley based consulting group focused on complete fast turn around of:



- Architecture,
- High Speed Board Design, Layout, Fab and Assembly
- System Specification, Architecture and Design
- FPGA Architecture and RTL Design- on site or off site.
- ASIC Verification in FPGAs (includes Board level architecture, design and debug)
- ASIC & FPGA Simulation

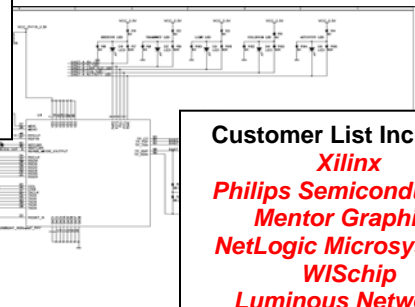


## PCI Express® Experience we can provide for your Project

- On PCI-SIG® Integrators List
- Co-Contributor and participant for the PCI Express® PIPE Connector Specification- 3 boards designed
- Successful Architecture and Implementation of 2 FPGA based PCIe® cores with **Board validation and Compliance at PlugFest**
- ASIC validation in 3 FPGAs of complex PCI Express® Chip completed- ASIC in production
- Over 8 PCI Express® Boards Delivered; 3 more currently in design



*"I highly recommend Tentmaker Systems! I have personally known the principals for 12 years and have used them many times to meet critical time to market designs. Most recently, with their help we were able define, design, debug and bring to market a complex packet processing and communications FPGA in record time."* Charles Barry, PhD, CEO, Brilliant Wireless.



*"Tentmaker Systems jumped in at the most critical time and worked with our architecture team and did a phenomenal job in fine tuning our core architecture. The entire team was extremely impressed with not only the professional approach but also the technical and systems depth at Tentmaker. It was a pleasure working with Neil and his team."* Bob Kondamoori, CEO Xalted Information Systems.

Customer List Includes:  
**Xilinx**  
**Philips Semiconductors**  
**Mentor Graphics**  
**NetLogic Microsystems**  
**WISchip**  
**Luminous Networks**  
**Xalted Info Systems**  
**Reliancy**  
**Yvent**



### Contact Information

Neil Mammen  
Tentmaker Systems

[consulting@tentmakersystems.com](mailto:consulting@tentmakersystems.com)  
[www.tentmakersystems.com](http://www.tentmakersystems.com)

We are always looking for experienced FPGA Engineers.  
Send a resume' to [hr@tentmakersystems.com](mailto:hr@tentmakersystems.com)