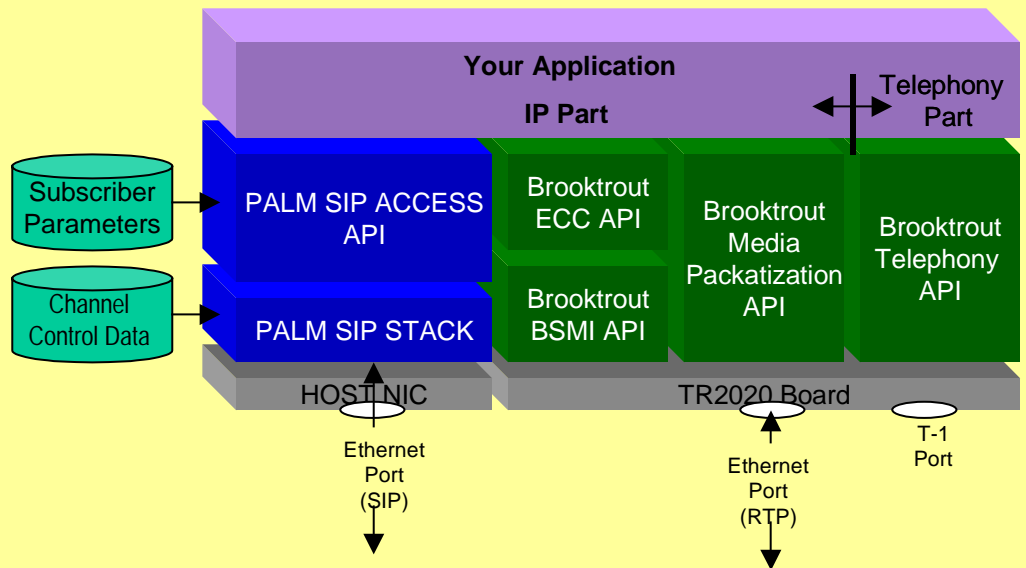


# Enterprise SIP Solution For the Brooktrout TR2020

PALM Associates, Inc. is developing a SIP adaptation for the Brooktrout TR2020 board. This product is in development with internal ongoing operational evaluation. The initial software architecture, which is currently in test, is illustrated in Figure 1.

A subsequent release based on Enhanced Call Control (ECC) is illustrated in Figure 2.

The expected price point for this product is \$10,000.00 for an executable version, with a warranty of 45 days. Support can be purchased for an additional 15% of the sale price per year.



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Figure 1 Initial Software Architecture

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## FEATURE SET

- Personal Mobility - users can maintain a single externally visible identifier regardless of their network location
- VoIP Interface for traditional telephony applications
- Complete integration with the Brooktrout TR2020 board
- Software only solution, you provide the board
- OS support: Windows XP/NT/2000,
- Planned OS support: Red Hat Linux, Solaris SPARC/x86, Windows Server 2003
- User Location – registration with directory services
- User Availability – Subscriber elects their availability for a call at this time
- User Capabilities – Definition of Media and media parameters that can be used
- Configure as User Agent (UA) – client or server (UAC/UAS) or as Proxy Server
- Management interface planned for next release

## SPECIFICATIONS

### RFC Compliance

- RFC 3261 SIP: Session Initiation Protocol
- RFC 1889 RTP
- RFC 2326 Real-Time streaming protocol (RTSP)
- RFC 3015 Media Gateway Control Protocol (MEGACO)
- RFC 2327 Session Description Protocol (SDP)
- May be configured as either a Proxy or user Agent

Tested with the following SIP clients:

- SJphone
- MSN Messenger
- SI PPS
- EZ-Phone
- More to follow

Compatibility testing with the following SIP components/proxies:

- Intel IPMG
- More to follow

Added Enhancements

- REFER command

## API FEATURES

The PALM SIP Access APIs hide the underlying low-level SIP APIs, and provide some simple APIs for application developers to use. Here are some sample methods and events to illustrate the direction of this API:

- Manage SIP connection
- Initialize SIP Interface
- SIP Call Progress Signals
- SIP/RTP Association
- Debug/Trace Control
- Logging Control
- Configuration setup and control

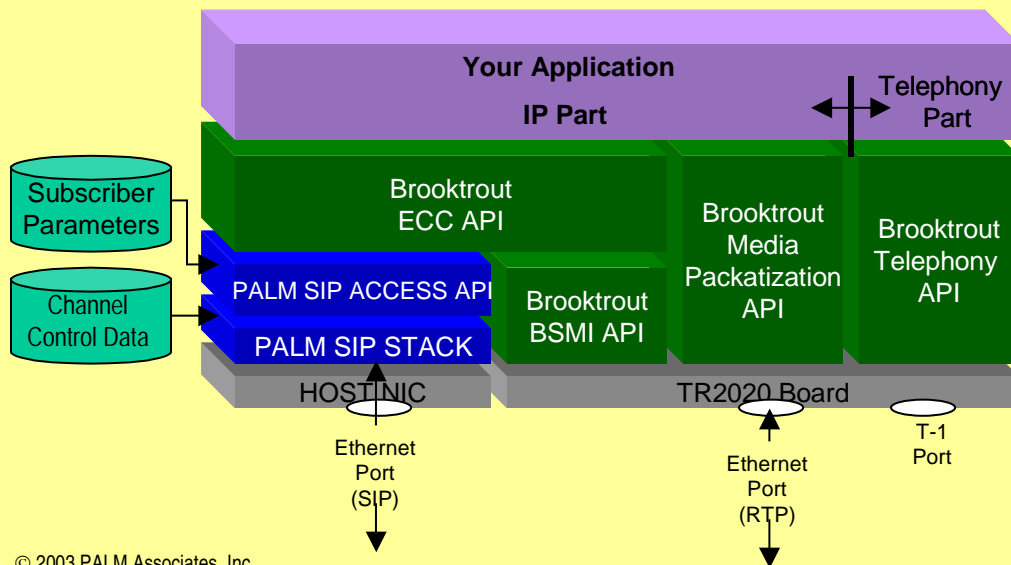
**Methods** (in "Synchronous or Asynchronous" mode)

- |                |                                 |
|----------------|---------------------------------|
| 1. sipInit     | Initialize the sip stack        |
| 2. WaitForRing | Wait for a new call             |
| 3. Answer      | Answer a call                   |
| 4. Transfer    | Transfer a call                 |
| 5. Hangup      | Hang-up the call                |
| 6. Register    | Register with a location server |
| 7. Cancel      | Cancel a call                   |
| 8. MakeCall    | Make a call                     |
| 9. GetSipEvent | Retrieve events                 |

**Events**

- |               |  |
|---------------|--|
| 1. Ringing    | Ring event when a new call comes in    |
| 2. Connect    | Connect event after a call is answered |
| 3. Disconnect | Disconnect event after caller hangs up |

## NEXT RELEASE of the SIP SOLUTION



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Figure 2 ECC Based Software Architecture