Inca-IP2

Infineon Single Chip Solution for IP-Phone Applications

Inca-IP2 LAN Phone v2.2.1

for

Inca-IP2 (PSB 21653)

Distribution with NDA only

Preface

This document gives an overview of the supported features, latest changes and open issues for the INCA-IP2 LAN Phone Version 2.2.1. All features have been tested in a module evaluation.

The version number "Version 2.2.1" is the label for the feature set described in **Table 2**.

This LAN Phone release replaces the package Version 2.1.3.

The verification is based on the EASY 21653-R1 reference board.

1 General Issues

Table 1 gives an overview about the components of the INCA-IP2 LAN Phone Version 2.2.1.

Table 1 Components of the INCA-IP2 LAN Phone Version 2.1.4

Component Type	Component Description, Version	Comment
Infineon LXDB	Version 1.2.1	
INCA-IP2 Linux BSP	Version 2.2.1	
INCA-IP2 TAPI	Version 3.5.3	
EDSP Firmware	Version 8.5.0.0.0	edsp_v8.5.0.0.0_rel-enc.bin
INCA-IP2 LAN Phone Software	Version 2.2.1	

Revision History: Previous Version: Revision 1.0

Major Changes: Converted to new format

2 Supported Features

Table 2 lists the available features of the INCA-IP2 LAN Phone Version 2.2.1.

Abbreviations used in **Table 2**: S = supported; Y = yes; N = no

Note: Not all INCA-IP2 hardware and EDSP firmware features are supported by current INCA-IP2 LAN Phone Version 2.2.1 release. In case of questions please contact your local Infineon Technologies sales team.

Table 2   Supported Features

Feature	S	Channels/ Resources	Restrictions/ Comments
Hardware Features			
Complete IP Phone	Y	n/a	
Optimized PCB for INCA IP2 based IP Phones	Y	n/a	
Narrowband capable Speakerphone and Handset	Y	n/a	
Wideband capable Speakerphone and Handset	Y	n/a	
Daughter board with all available INCA IP2 interfaces; Ethernet, EBU, SPI, ASC etc.	Y	n/a	
4'5" Colour TFT display driven by Epson S1D13733 LCD controller	Y	n/a	
NAND Flash Boot ROM	Y	n/a	
Gigabit Ethernet Phys	Y	n/a	
Telephony Features			
3 Way conferencing	Y	n/a	
Volume control	Y	n/a	
Codec Selection	Y	n/a	
Loudhearing / Speakerphone selection	Y	n/a	
Address Book	Y	n/a	
Messaging	Y	n/a	
SIP Features			
Receive Call	Y	n/a	
Initiate Call	Y	n/a	
Call on Hold	Y	n/a	
Call Waiting	Y	n/a	
Call Forward	Y	n/a	

3 Changes

Table 3 lists new features, improvements and bug fixes in INCA-IP2 LAN Phone Version 2.2.1.

Table 3   Changes in Version 2.2.1 (compared to previous release)

Change	Change Type
Added complete support for wideband calls.	New Feature
Fixed a problem that would cause the display task to crash.	Bug Fix

3.1 History

These are the changes for previous version of INCA-IP2 LAN Phone.

Table 4   Changes in Version 2.1.3 (compared to previous release)

Change	Change Type
Display LEDs are now correctly indicating incoming calls and audio mute	Bug Fix
Signals for keyboard events will now be transmitted to GTK+ via DirectFB keyboard driver, to prevent loss of events.	Bug Fix

4 Open Issues

Table 5 contains open issues of the INCA-IP2 LAN Phone Version 2.2.1. If available the appropriate Remedy ticket number is given in the issue headline.

Table 5 Open Issues of the INCA-IP2 LAN Phone Version 2.1.3

Description of Issues	Status
Wideband optimized for handset only Acoustic parameters for wideband calls have only been optimized for handset mode. Handsfree mode has been done on a best effort method.	Open
Memory leak in GTK+ The used GTK+ package or one of its dependencies leak memory. After a certain amount of calls it will be necessary to reboot the phone, since all free memory has been used.	Open
Time not updated in Phone Application Sometimes the time in the top left corner of the display may not be updated in the phone application, although the system time is correct.	Open
Late detection of incoming calls from VoIP provider When using Sipgate as VoIP provider (probably other ITSP also), incoming calls may have a delay of up to 15 seconds. This may lead to cancelation of the call by the calling phone.	Open
Conference key not always working The conference key must be pressed twice, after a conference has been established once.	Open
Voice transmission delayed by phone application After a call is set up, the voice transmission may need up to two seconds to start.	Open
Redialing to wrong number When forwarding calls to another phone, the redial option of the calling phone is adjusted to the forward destination instead of keeping the original address.	Open
Incorrect "Call in Progress" message When entering incorrect data, like invalid phone numbers, instead of an error message the "Call in Progress" message is displayed.	Open
Received calls register cannot be used to initiate a call When using the register of received calls to start a call, the "Call in Progress" message is displayed instead.	Open
Problem with not answered calls using Sipgate (probably other ITSP also) When placing a call and other party is ringing but not taking the call, the call is not cancelled correctly when hanging up. As a result the other party will ring indefinitely	Open
Phone application crash after illegal key press For certain combinations of key presses it is possible that the phone application crashes.	Open
Multiple line appearence Multiple Line Appearance is not supported	Open
Bad voice quality due to uninitialized Blue Moon The bluetooth chip Blue Moon, which is íntegrated in the phone but not used, is not initialized by the software. This causes the chip to start sending data on the serial port (ASC0) for several minutes until it powers down. This data transmission causes a reduction of voice quality. As a workaround the adapter board can be connected to the phone and ASC0-Cut switch (SW_A4-7) be set to on.	Workaround

Literature References

[1]   INCA-IP2 EDSP Firmware V8.5.0.0.0 Release Note Rev. 1.0

[2]   INCA-IP2 Linux BSP v02.02.01 Release Notes Rev. 1.2

[3]   Getting Started Linux BSP Rev. 2.4

Attention: Please refer to the latest revision of these documents.