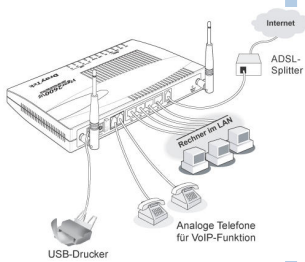


**DATA SHEET**

1200-101-0106

**VoIP WLAN Router + DECT**



**PRODUCT DESCRIPTION**

VoIP ADSL Router  
WLAN/DECT/ISDN/POTS  
802.11a 11MHz @ 2.4GHz  
802.11b 54MHz @ 2.4GHz  
DECT 20MHz @ 1.8GHz

**Ready-to-Production Design**  
including Digital OQC Test

**ADSL2 Router** incl. dying gasp  
LAN Internet 1...5  
WLAN Internet  
VoIP  
ISDN NT and TE (incl. lifeline)  
POTS FXS and FXO (incl. lifeline)

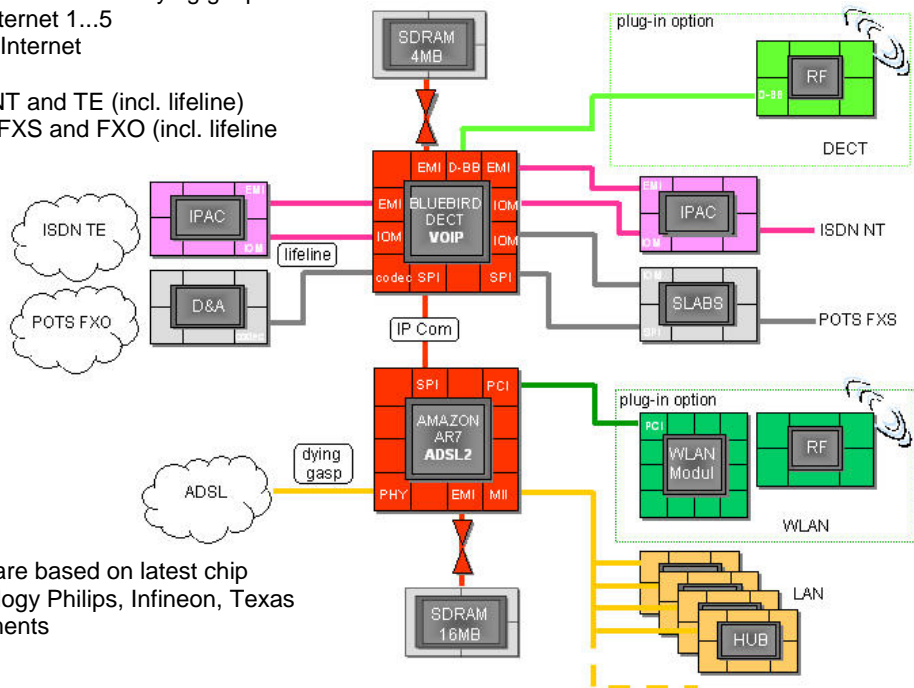
**APPLICATIONS**

VoIP IAD or CPE for residential use  
and SOHO applications.  
ISDN services via SIP service  
cordless DECT optional plug-in  
WLAN miniPCI module optional plug-in

POTS or ISDN LIFELINE circuit  
(power down operation)  
plus Dying Gasp message to DSLAM

**HARDWARE**  
Block Diagram

Ref Designs  
Layout Service  
Design to CI  
Production Service  
Upgrade Service  
ODM Support



Hardware based on latest chip  
technology Philips, Infineon, Texas  
Instruments

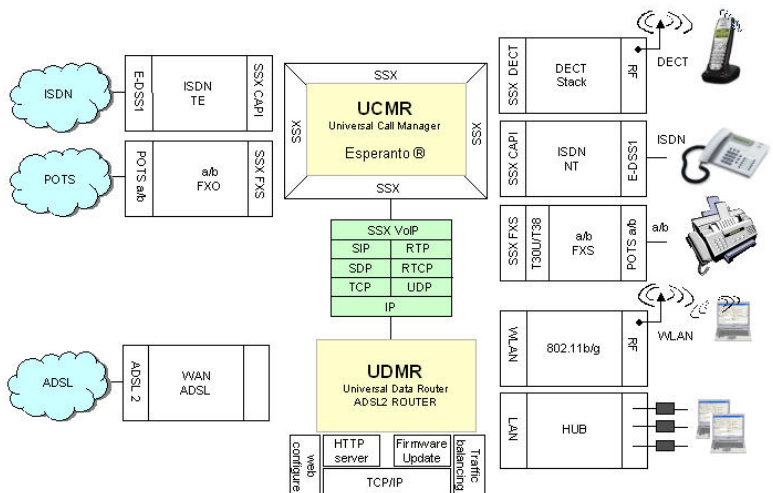
**SOFTWARE**  
Block Diagram

Source Codes  
KnowHow Transfer  
Joint Design  
Digital Test + BITE  
Customizing OEM  
Turnkey Design

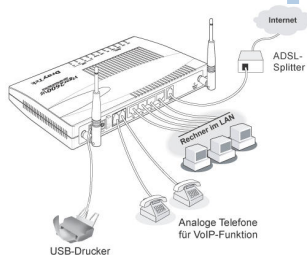
modular concept  
C/C++ code

SIP stack VoIP  
D&A Source Code  
(on request)

UCMR  
Universal Call  
Manager  
Esperanto®



RFQ under and info@da-research.de  
Ref No 1200-101-0106



**DATA Services**

**ADSL**  
technology (preferred)  
Annex A / Annex B

**ADSL2**  
Annex A / Annex B

Annex L and M  
Annex J  
non-overlapped  
operation

**ADSL2+**  
Annex A / Annex B  
1Mbps up  
Annex M  
Annex J  
operation

ITU-T G.994.1  
ITU-T G.997.1

ADSL multi mode

Dying Gasp  
Modem Selftest

DSL forum interoperability  
low power modes

configuration  
via web interface

PC to LAN  
DSL

routing

Security

Adress Translation  
DHCP

WAN Protocols

QoS

**ITU-T G.992.1**  
Infineon Amazon  
8Mbps down  
1Mbps up

**ITU-T G.992.3**  
8Mbps down  
1Mbps up  
standard  
option  
spectrum

**ITU-T G.992.5**  
8Mbps down /  
  
standard  
option  
non-overlapped

ADSL/ADSL2  
Annex B  
ADSL/ADSL2+  
Annex B  
pof to DSLAM  
EOC channel

TR-067  
ITU-T G.992.3

local  
HTML

HUB 4  
ANSI T1.413  
G991.1-5  
RFC 1483  
RIP V1/2  
IGMP Prox  
IP forward  
MAC encapsulate

statefull firewall  
PAP; CHAP  
MS-CHAP

NAT/NATP ALGs  
DHCP (C/S/R)  
DNS relay  
PPPoE  
TFTP

ToS, Diffserv  
ETH 802.1p/q  
UBR

**LAN**

technology (preferred)  
10Base-T  
100Base-T  
Auto Negotiation  
Audio MDIX function  
configuration

transparent bridging  
MPOA encapsulation

PPPoE  
PPP LCP renegotiation  
VPN PassThrough for

NAT/PAT  
Port Forwarding  
PPPoE Pass Through  
DHCP server/client/relay  
Dyn DNS and proxy

**IP QoS**

IP-QoS upstream  
TOS Bit support  
Rate Limiting  
implementation EF  
mapping L2-L3-QoS  
dynamic IP fragmentation

**ATM Layer**

AAL5  
Traffic Control  
UNI

Physical layer characteristics  
OAM

Traffic Management (TM)  
TM services

VCCs  
PVCS  
VCCs  
queueing/buffering  
VPI Range  
VCI range

**WLAN Standard**

technology (preferred)  
WiFi 11Mbit/s 2.4GHz  
WiFi 54Mbit/s 2.4GHz  
encryption

QoS

codecs

Infineon Amazon  
IEEE 802.3-2002  
IEEE 802.3-2002  
IEEE 802.3-2002  
on/off  
local  
HTML  
IEEE 802.1 D  
RFC 2684  
RFC 1483  
RFC 2516  
RFC 1570  
VoIP (SIP)  
IPsec, L2T, PPTP  
with ALG function  
configurable  
option: on/off  
switchable  
standard

EF EHP (see VoIP)

individual per queue  
„strict priority queue“  
WLAN/LAN/WAN  
PMTU

**I.361**

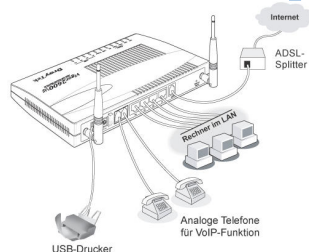
I.363.5  
I.371  
I.432  
Physical layer characteristics  
I.610  
Fault Management)  
af-tm-0121.000  
UBR, VBR.nrt  
VBR.rt  
I.150  
min 2 simultaneous  
independ.configure  
cell layer  
0-128  
1-256

Infineon/Atheros  
802.11b  
802.11g  
WEP 40/56 bit  
WPA 128 bit  
WPA/WPA2  
WMM  
G.711 (a- and  $\mu$ -law)  
G.729 AB  
G.723  
G.726

**Technical Datas**

extract

full features  
on request  
and via NDA



## Technical Datas

extract

full features  
on request  
and via NDA

### AUDIO Services

#### DECT (option)

technology (preferred)

Philips  
VEGA Bluebird

RF module (preferred)

Samsung

DECT GAP telephony

ETSI EN 300 444  
5 ...6 handsets

DECT DPRS data  
pro-longed b-field  
Antenna  
enhanced services

ETSI EN 301 649  
450kbps asymm  
diversity FP mode

MMI

CLIP/CLIR  
display info

option mountable  
configuration

ETP  
SMD RF modul  
local  
HTML

#### POTS FXS

ETSI

to terminal  
EN 300 001  
chapter 1-10

data transmission

optional  
ETSI EN 300 659  
standard, FSK  
ETSI EN 300 001  
FTZ 1TR110

DTMF, CLIP, keypad  
Hook Flash

#### POTS FXO

ETSI EN 300 00  
data transmission

to WAN  
including life line  
chapter 1-10  
ETSI EN 300 659  
part 1-3  
4 kV transient  
TNV1 interface  
EN60950

insulation  
security

#### ISDN NT

Hook Flash

ETSI EN 300 001  
FTZ 1TR110  
ITU-T I.430, ETS

300 012

ITU-T Q.920 - 923  
ITU-T Q.930 - 932  
ITU-T Q.939

resistance  
bus configuration

switchable DIP  
short  
extend. passive  
point-to-point  
TNV1 interface  
EN60950

security

#### ISDN TE

Hook Flash

including life line  
ETSI EN 300 001  
FTZ 1TR110  
ITU-T I.430  
ETS 300 012  
ITU-T Q.920 - 923  
TNV1 interface  
EN60950  
EN 60603-7  
EN 28 877

security

connector

#### ISDN Supplementary Services optional

CLIR	CL Ident Restrict
CW	Call Waiting
CH	Call Hold
CCBS	Call Completion BS
CCNR	Call Completion NR
3PTY	3 Party Conference
configuration	local HTML

#### VoIP

##### RFC Compliance a.o.

SIP V2.0	RFC 3261
SIP Info Message	RFC 2976
Offer/Answer Model SDP	RFC 3264
location server	RFC 3263
notify	RFC 3265
SDP	RFC 2327
digest authentication	RFC 2617
Refer	RFC 3515
RTP	RFC 1889
RTP payload for DTMF	RFC 2833
RTCP	RFC 1890
MWI, event package	RFC 3842
STUN	RFC 3489
RTP conferencing	RFC 3551
map ISDN-SIP	RFC 3578
ringing tone generation	RFC 3960
FaxoIP	T330U/T38
STUN	on/off
Line Echo Cancellor	LEC
VAD	on
CNG	on
IP QoS upstream	EF EHP

##### included SIP methods

alphanumeric account	http
	authentication digest
Line Echo Cancellor	PHS LEC
INVITE	RFC 3261
ACK	RFC 3261
BYE	RFC 3261
CANCEL	RFC 3261
REGISTER	RFC 3261
OPTIONS	RFC 3261
UPDATE	RFC 3311
REFER	RFC 3515
SUBSCRIBE	RFC 3265
NOTIFY	RFC 3265
numbering plan support	E.164
AC	anonymous call

##### Codec Support

Codec G.711 A-law	DSP VEGA Bluebird
Codec G.726 ADPCM	DSP VEGA Bluebird
Codec G.723 (1)	DSP VEGA Bluebird
Codec G.729 (2)	DSP VEGA Bluebird
	max x simult. Calls