

Model Name: DVG-5004S/6004S/7022S VoIP Gateway

External Specification Version

Version: 1.0 2006/01/17

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DVG-5004S/6004S/7022S Specification Revision History

Version	Revised Date	Person Name	Content Revised
1.0	2006/01/17	Tony Cheng	First Edition



1. Product Descriptions

D-Link Corporation is considering upgrades DVG-5004S/6004S/7022S of its VoIP Gateway potential usage in the 1Q 2006. Below is the baseline engineering specification for the product. Exceptions to the D-Link-requested minimum specifications should outline advantages your proposed alternative design can add to quality, cost, time to market, performance, manufacturability, etc. List all assumptions made, including any exceptions to D-Link's requirements and if necessary, attach additional documentation to support your response. A full hardware (and software, if applicable) specification along with a schematic, costed bill of materials, mechanical drawing, and development schedule (showing all milestones: test, validation, regulatory approvals, etc.) should accompany your quotation.

2. Product Features

1.1.1.1 WAN Access Types:

DHCP client

PPPoE client

Static IP address

PPTP

BigPond Cable (Australia)

1.1.1.2 Support MAC Cloning on WAN port

1.1.1.3 Bridge and Router mode

1.1.1.4 Router mode features:

DHCP Server

Virtual Server

Port Triggered Special Application

DMZ

Port Filter

IP Filter

MAC Filter

URL Filter

RIP I & II

Static Route

DDNS - DynDns.org, TZO, 3322.ORG, Peanut Hull

NAT Traversal - Pass-through NAT, STUN client, UPnP Control Point

- **1.1.1.5** Support NTP
- 1.1.1.6 Phone Book Manager Server (selected version), up to 200 IAD registration
- 1.1.1.7 Phone Book Manager Client
- 1.1.1.8 DoS prevention engine inbuilt (configurable)



1.1.1.9 QoS features:

SIP and RTP always first policy

WAN access rate control

IP Precedence, DSCP (DiffServ) tagging on SIP and RTP packets

LAN port rate limit, hi/low queue control

1.1.1.10 SIP Features:

By Port registration

By IAD registration

Mixed configuration of "By Port" and "By IAD" on the same IAD

Outbound Proxy

Session Timer: Update, Re-Invite

E.164 Numbering

Redundant SIP PROXY support (failover by registration)

SIP PING (on special version)

Adjustable NAT port binding interval (bind with Proxy)

CLIR (anonymous Caller ID)

Hot line / Warm line

FXO dial out prefix

Group hunting, configurable hunting sequence

Support one-way media (SIP 183)

Call Hold

Call Waiting

Call Transfer - attended, unattended

Call Forward – unconditional, busy, no answer

3-Way Calling - Compatible with NORTEL MCS5200 (on special version)

T.30 FAX pass-through

T.38 FAX relay

Adjustable FAX TONE detection level

Out-of-band DTMF - RFC2833, SIP INFO

1.1.1.11 Telephony Features:

G.711 a/µ, G.726(32K), G.729A, G.723.1

Adjustable jitter buffer

Adjustable packet time (by Codec type)

Silence Detection and Suppression

Echo Cancellation

Digit Map defines number length by leading digits, route assignable

Local phone book enables calling to other VoIP device without registration

Speed Dial



Caller Filter accept/deny caller by IP address

On machine recordable prompt message

Prefix replacement, removal while dialing out from FXO

Reject dial-out through FXO by prefix

FXS Caller ID Generation: DTMF, FSK (Bellcore/ETSI)

FXO Caller ID Detection: DTMF, FSK (Bellcore/ETSI)

End of digit tone (inform user complete codes accepted)

Force calling PSTN code (for IAD with mixed FXS and FXO)

Configurable dial-way timeout/inter-digit timeout/DTMF on-off length

Adjustable listening & speaking volume $(-6 \sim +6)$

Adjustable tone volume (1~5)

Adjustable FLASH time

1.2.12 **Management:**

WEB & TELNET

By Provision Server (selected version only)

Two privilege WEB login account

Three WEB languages by default – English, TC, SC

System Information shows device status and registration status

Per call RTP packet summary

PING test

STUN inquiry



Mechanic & ID Design

2.1.1 Outlook

Unavailable

2.1.2 Case

Other

2.2 Physical & Environment

2.2.1 Power input

- DC 12V/ 1.25A, External Power adapter

2.2.2 Operation Temperature

- 0-40°C

2.2.3 Storage Temperature

- -10-55°C

2.2.4 Humidity

- 5 ~ 95% non-condensing

3. Emission (EMI) Certifications:

- FCC class B, CE mark class B

4. Safety Certifications:

- UL/CUL/EN60950