OVERVIEW

Starvoice SV1042 - SV2042 is a family of Integrated Access Devices (IADs) designed to provide small and medium businesses with integrated broadband data and carrier-class voice services over a single copper pair. The SV1042 - SV2042 family supports both Asymmetric Digital Subscriber Line (ADSL) and Symmetric high-speed Digital Subscriber Line (ShDSL) access technologies and is based on VoATM BLES Services. The SV1042 - SV2042 is the only mixed mode IAD (POTS+BRI) on the market. SV1042 - SV2042 technology is based on Aethra's extensive experience on ISDN for voice networks.

EFFICIENT INTEGRATION

SV1042 - SV2042 IADs guarantee seamless installation and the highest degree of compatibility with every type and brand of legacy telephony devices, including fax machines, phone sets, answering machines, and modems.

ROUTING CAPABILITIES

Starvoice provides routing and bridging capabilities with NAPT, DNS and DHCP services. It offers firewall functionality to prevent unauthorized hosts from externally accessing the internal LAN. It supports VPNs to protect data when sent from one site to another, such as a branch office to corporate headquarters, using a public network such as the Internet, and to allow businesses to use low-cost connections to the Internet without sacrificing the security that private leased lines provide.

REMOTE MAINTENANCE

SV1042 - SV2042 IADs also offer service providers numerous remote maintenance features, including diagnostics for user ports.

FEATURES AT A GLANCE

- ADSL or ShDSL based Integrated Access Device
- Mixed mode IAD (POTS+ISDN BRI)
- Different models provide for multiple configuration of POTS and ISDN BRI ports
- Toll-quality POTS interfaces and well proven compatibility with analog user equipment
- Remote management and diagnostic features, including extensive testing of the POTS interfaces
- 10 Base-T and 10/100 Base-T Ethernet interface (optional)
- Routing and bridging functionalities with NAT DNS and DHCP server functionalities
- VPN and firewall capability

Fit for ULL
Ideal solution for providing high-quality broadband voice and data services to SME customers at superior cost savings

Suitable
Compatible and interoperable with most standard-based DSLAMs and Voice Gateways, permits to select the Voice Gateway Operator

Flexible
Different configurations allow Operators to offer the best suited and least expensive solution to different customers requirement
TECHNICAL SPECIFICATIONS

INTERFACES
• ADSL (SV2042 models) or ShDSL line interface (SV2024 models)
• POTS ports (none, 2 or 4)
• ISDN-BRI ports (none, 2 or 4)
• Ethernet 10BaseT (all models), 10/100BaseT (optional)
• RS232 serial console interface (all model)

ATM
• Up to 10 VCC
• Configurable CBR, VBR-n and UBR

Cabling
• AAL-2 and AAL-5 Adaptation layer

LED INDICATORS
• Power
• Ready
• Emergency
• ADSL/ShDSL Line
• ADSL/ShDSL Sync
• POTS
• ISDN

NETWORK INTERFACES
• ShDSL: ETSI TS 101 524, ITU G.991.2
• Line rate up to 2304 kbps (3 to 36 DS0 channels)
• ADSL: ITU-G.992.1 (g.dmt), ITU-G.992.2 (g.lite)
• Upstream rate up to 832 Kbps, downstream up to 8192 Kbps

NARROWBAND INTERFACES
• POTS: compliant to G.555 requirements
• Port impedance: real 600 or complex Euro values.
• Low distortion ringing voltages diagnostic features
• BRI: fully compliant to layer 1 standards.
• Data Interface

ROUTING AND BRIDGING
• IP routing with RIPv1, RIPv2 e RIPv1 compatible
• Static routes
• Transparent MAC level bridging supporting
• Spanning Tree Algorithm

ACCESS PROTOCOLS
• IP over AAL-5, Ethernet over AAL-5 (RFC2684)
• PPP over AAL-5 (RFC2364) and PPP over Ethernet (RFC2516)
• LLC/SNAP and VC encapsulation

SECURITY
• Client side PAP/CHAP/MS-CHAPv2
• Authentication
• Extended Access Lists
• User and administrator access level to configuration facilities

ENHANCED DATA OPTION
• Additional 10BaseT port
• Hardware encryption engine (DES, 3DES, …)

MANAGEMENT AND CONFIGURATION
• SNMPv1, SNMPv2c Agents
• Embedded web server
• Embedded telnet server
• Extensive Command line interface (local and remote via telnet)
• Embedded file system (configuration and firmware upgrade)
• Windows based wizard for configuration and firmware download

REFERENCE STANDARDS

User Interface
• ITU-T G.711, G.711 Appendix I and II
• ITU-T G.726
• ITU-T G.165/G.168

Network interface
• ShDSL: TS 101 524, ITU G.991.2
• ADSL: ITU-T G.992.1, ITU-T G.992.2
• ATM
• ITU-T I.361, I.363.5, I.363.2, 1.432, 1.610, 1.732
• ATMF UNI 3.1, ATM Traffic, Loop Emulation Services and Narrowband Signalling
• ATM Forum at-vmoa-0145.000, fb-vmoa-0175.000, fb-vmoa-0174.000
• ETSI EG 201 900-1, TS 300 324-1 and TS 300 347-1

MODELS
SV1042, based on ADSL, provides 0, 2 or 4 POTS ports and up to 2 BRI ISDN accesses (or 4 BRI without POTS).
SV2042, based on ShDSL, provides 0, 2 or 4 POTS ports and up to 2 BRI ISDN accesses (or 4 BRI without POTS).

The following table describes the different accesses (or 4 BRI without POTS).

<table>
<thead>
<tr>
<th>Model</th>
<th>Access Technology</th>
<th>POTS Ports</th>
<th>BRI Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV1002</td>
<td>ADSL</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>SV1004</td>
<td>ADSL</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>SV1020</td>
<td>ADSL</td>
<td>2</td>
<td>0</td>
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<td>SV1040</td>
<td>ADSL</td>
<td>4</td>
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<td>SV1042</td>
<td>ADSL</td>
<td>4</td>
<td>2</td>
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<tr>
<td>SV2002</td>
<td>ShDSL</td>
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<td>2</td>
</tr>
<tr>
<td>SV2004</td>
<td>ShDSL</td>
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<td>4</td>
</tr>
<tr>
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<tr>
<td>SV2040</td>
<td>ShDSL</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>SV2042</td>
<td>ShDSL</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL RANGE
• Operating temperature: 0° to 40°C (32° to 104°F)
• Non Operating temperature: -35° to 70°C (-31° to 158°F)
• Operating humidity: 0 to 95% noncondensing

POWER
• External Class II AC/DC network adapter
• Input voltage from 90 to 250 Vac.
• Option: power adapter with an internal battery
• Power backup unit (PBU): small footprint, metal case with dimensions 213x156x52 mm

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