## NetLink Data Link Processor

Tactical network multi-link processing for today and the future

### Specification

<table>
<thead>
<tr>
<th>Processing Platform</th>
<th>Power PC, Intel i.7, X86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Embedded Windows XP 7</td>
</tr>
<tr>
<td>Green Hills Integrity</td>
<td>5.2.2 + 11.0-4</td>
</tr>
<tr>
<td>Linux</td>
<td>Debian, CentOS</td>
</tr>
<tr>
<td>Applications</td>
<td>Forwarding</td>
</tr>
<tr>
<td>Link Processing</td>
<td>STANAG 5511 Ed8</td>
</tr>
<tr>
<td>Link 11</td>
<td>MILSTD 6016C</td>
</tr>
<tr>
<td>Link 16</td>
<td>MILSTD 6016E</td>
</tr>
<tr>
<td>Link 22</td>
<td>STANAG 5516 Ed6</td>
</tr>
<tr>
<td>VMF</td>
<td>MILSTD 2045-47010</td>
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<tr>
<td>VMF</td>
<td>MILSTD 6017</td>
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<tr>
<td>AFAPD</td>
<td>MILSTD 6017A</td>
</tr>
<tr>
<td>Bowman</td>
<td>MILSTD 6017B</td>
</tr>
<tr>
<td>SIMPLE</td>
<td></td>
</tr>
<tr>
<td>NATO Friendly Forces Information (NFFI)</td>
<td>v1.3</td>
</tr>
<tr>
<td>Cursor On Target (COT)</td>
<td>–</td>
</tr>
<tr>
<td>ADWP/3</td>
<td>Over The Horizon Targeting Gold (OTH-GOLD) Operational Specification Rev D</td>
</tr>
<tr>
<td>Keyhole Markup Language (KML)</td>
<td>OpenGIS KML Encoding Standard</td>
</tr>
<tr>
<td>Automatic Identification System (AIS) messages</td>
<td>ITU-R M.1371-2</td>
</tr>
<tr>
<td>Automatic Dependant Surveillance – Broadcast (ADS-B)</td>
<td>RTCA DO-260</td>
</tr>
<tr>
<td>Dismounted Solider System</td>
<td>STANAG 4677</td>
</tr>
</tbody>
</table>

### Drivers

| JREAP-C              | STANAG 5516 Ed1 |
| SIMPLE              | STANAG 5602 Ed 3 |
| Data Distribution Service (DDS) | RT1.4.4 |
| High Level Architecture (HLA) | HLA 1.3 |
| Webservice           | – |
| RAMEA 0183          | over serial for AIS receiver connection |
| Combat Net Radio    | MILSTD-188-220B     |
| MIDS LVT            | MILSTD-188-220D     |
| ATIDS                | MILSTD-188-203.1A   |
| Small Tactical Terminal (SIT) | Platform J |
| TaicNet Tactical Radio (TTR) | Platform J |

## Data links are a key component in meeting the vision for networked warfare in the Joint and Coalition battle space. Connectivity provides timely situation awareness aiding effective command and control to ensure correct, high tempo engagement.

General Dynamics is focused on connectivity through the provision of communications and data link systems, with over 15 years experience delivering into Air, Land and Naval assets.

### Applications include:
- Command and Control (C2)
- Maritime Patrol
- Ground based air defence
- Tactical reconnaissance and surveillance
- Joint and coalition operations

### The NetLink DLP family offers:
- Operational proven maturity
- Fast, accurate, reliable message processing to ensure error free high temp operations
- Prove flexible interface for risk free mission system integration
- High degree of automation to support message standards evolution
- Complete life cycle support
Connecting and Protecting

Extensive Tactical Networking Expertise
- NATO Tactical Data Links (Link 11, Link 16, Link 22)
- Air Land integration (AFAPD, VMF)
- Land Tactical (VMF, Bowman, IRIS)
- Blue Force Tracking systems (HeATS, GrATS)
- Maritime AIS (white shipping Automatic Identification System)
- NATO Friendly Force Information (NFFI)
- Non-NATO and national data link formats (SECSOS, Link Y, 4677)
- Beyond line of sight (Joint Range Extension, OTH-G)

Market Leading Link and Platform Integration Technologies
- Open Standard Common Software Interfaces
- DDS, Web services, KML
- Link Independent Format (LIF)
- FACE and ASAPC avionics architecture compatible
- Services oriented architecture

Proven Multi-Link and Gateway Capability
- Simultaneous multi-link operation
- Multi-standard/Multi-link processing
- Provides smart message forwarding and translation
- Across tactical and non-tactical links/bearers.

Software only solution
- Open architecture to enable all TDL managers to be inserted as required
- Full C2 processing
- Operating System (OS) supported:
  - Windows
  - Linux
  - Green Hills Integrity
  - VWorks
- RTCA DO-178B Level D certified
- Multiple API for host integration:
  - Sockets
  - Web services
  - DDS
  - C/C++
  - ASAPC / ECOA / FACE compliant
- Management of all Link 16 terminal types

NetLink Airborne Solutions

Dedicated 1/2 ATR Data Link Processor (DLP)
- Multi-TDL support (non C2 node)
  - Link 16
  - AFAPD
  - VMF
- HMI generation including SoftMap digital map application for improved situation awareness
- Video switch for easy integration into an existing airframe display system
- Multiple Link 16 terminal support
  - MIDS LVT
  - URC-138
- Qualified for harsh airborne fast jet environment
- Growth path to full C2 node

Ultra low SWaP DLP
- Multi-TDL support (C2 node)
  - Link 11
  - Link 16
  - Link 22
- VMF
- Multiple Link 16 terminal support
  - MIDS LVT
  - STT
  - TTR
  - JRE
- Qualified for harsh airborne fast jet environment
- Supports distributed computing architectures

Dedicated 3U or 6U module
- Open standards interface (VME and cPCI)
- RTCA DO-178B Level D certified
- Multi-TDL C2 processing
  - Link 11
  - Link 16
  - Link 22
- Airborne qualified
- Option for AFAPD and VMF
- Terminal support
  - MIDS LVT
  - STT
  - TTR

Automated Repeatable Testing
- Extensive script driven testing
- Automated build and execution daily as required
- Continuously growing coverage of fields and values