

Purpose:

This document provides an overview of the system architecture of the Globespan Virata ISL39300A platform (the "Platform") as it relates to the Linux operating system ("OS") and other open source applications which are subject to either the GNU General Public License (the "GPL") or the GNU Lesser General Public License (the "LGPL"). The purpose of this document is to assist Globespan Virata customers in identifying the relevant license terms and conditions that apply to specific applications within the Platform so that each customer has an understanding of how such terms and conditions may relate to the use or modification of the Platform software. This overview is offered for general guidance of system architecture only. The applicable Globespan Virata, GPL and LGPL license(s) should be consulted for a full description of the license terms and conditions as they apply to the respective applications within the Platform architecture.

Background:

Globespan Virata manufactures integrated circuits ("IC") for wireless local area networks ("WLAN") and develops reference designs that enable Globespan Virata customers to enter into rapid, volume production upon release of the IC's. Globespan Virata customers are typically large, overseas manufacturers which customize both hardware and software elements of the reference design in order to suit the needs of customers which are frequently branded companies that sell the modified Platform to the retail market. Globespan Virata's technology is licensed to its customers pursuant to one or more license agreements which state that portions of the Platform software are subject to either the GPL or the LGPL. Additionally, the development with specific identification of those elements which are covered by the GPL or the LGPL.

System Architecture:

ISL39300A – PRISM Dual Band Access Point Developers Kit ("APDK")

The following diagram illustrates the software architecture of the reference design Platform.





Applicability of Licenses:

As is reflected in the above chart and the associated legend, the Platform is comprised of code which can be broken down into three categories:

- Source licensed code
- Closed source code
- (L)GPL licensed code

Only those sections designated by the legend as "(L)GPL Licensed Code" are subject to the GPL or the LGPL. These include the following sections of Platform code: the MVC Driver, the PCI Driver, the uCLinux Kernel, NAT, Bridging, TCP/UDP stack, SNMP, Web Server, TFTP Server, DHCP Server, PPPoE, PPTP, and PPP. Globespan Virata customers should familiarize themselves with the terms and conditions of the GPL and the LGPL when modifying or altering these code sections in order to assess the manner in which these licenses may affect the resulting code.



There are two primary code sections that are often the focus of discussions when modifications to the Platform occur. The first is the Mac Virtual Co-Processor (the "MVC") which operates both the 802.11 radio and the Ethernet port(s). The MVC is architected as a co-processor to the ARM9 and is not linked into the Linux Kernel. The primary reason for this architecture is that the MVC performs time-critical radio functions and requires direct access to the ARM9, rather than going through the IRQ handler of Linux. Globespan Virata has kept the MVC code as closed source, even to licensed customers, both due to the complexities involved in maintaining WiFi compliance as well as to ensure that products from all vendors utilizing this software will interoperate well. The MVC is closed source and is not subject to the terms of either the GPL or the LGPL.

The second code section is the Port Authentication Entity Daemon ("PAED"). This code block controls 802.1x and WPA functions. It is proprietary code which runs in user space within the Linux OS. Globespan Virata was one of the first developers to implement this functionality in WLAN products, and considers this code to provide the company with a competitive advantage. As such, Globespan Virata has elected not to release it into the public domain. The PAED is closed source is and not subject to the terms of either the GPL or the LGPL.

GPL Compliance

Globespan Virata complies with the terms and conditions of the GPL and LGPL when using code covered by such licenses. Globespan Virata wishes to ensure that all Globespan Virata customers are aware of the terms and conditions of the GPL and LGPL as these licenses contain terms which may affect code which is based upon, or derived from, the modification or alteration of code subject to the GPL or LGPL. Similarly, Globespan Virata customers may wish to communicate with their end customers in order to ensure their awareness of the terms of the GPL and the LGPL.

GlobespanVirata Intellectual Property

Platform code which is not subject to the GPL or the LGPL is proprietary to Globespan Virata or is licensed by Globespan Virata and is subject to the terms and conditions of the Globespan Virata license. Such code should only be utilized in a manner consistent with the applicable Globespan Virata license.