



Connect Tech Inc.

Embedded Computing Experts

www.connecttech.com

USERS GUIDE

CTI-BSP V003 for Jetson TX1 Carriers Release Notes

Connect Tech Inc.

42 Arrow Road
Guelph, Ontario
N1K 1S6

www.connecttech.com

Tel: 519-836-1291
Toll: 800-426-8979 (North America only)
Fax: 519-836-4878
Email: sales@connecttech.com
support@connecttech.com

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Preface

Disclaimer

The information contained within this user's guide, including but not limited to any product specification, is subject to change without notice.

Connect Tech assumes no liability for any damages incurred directly or indirectly from any technical or typographical errors or omissions contained herein or for discrepancies between the product and the user's guide.

Customer Support Overview

If you experience difficulties after reading the manual and/or using the product, contact the Connect Tech reseller from which you purchased the product. In most cases the reseller can help you with product installation and difficulties.

In the event that the reseller is unable to resolve your problem, our highly qualified support staff can assist you. Our support section is available 24 hours a day, 7 days a week on our website at: www.connecttech.com/sub/support/support.asp. See the contact information section below for more information on how to contact us directly. Our technical support is always free.

Contact Information

Mail/Courier

Connect Tech Inc.
Technical Support
42 Arrow Road
Guelph, Ontario
Canada N1K 1S6

Email/Internet

sales@connecttech.com
support@connecttech.com
www.connecttech.com

Note:

Please go to the [Download Zone](#) or the [Knowledge Database](#) in the [Support Center](#) on the Connect Tech website for product manuals, installation guides, device driver software and technical tips. Submit your technical support questions to our customer support engineers via the [Support Center](#) on the Connect Tech website.

Telephone/Facsimile

Technical Support representatives are ready to answer your call Monday through Friday, from 8:30 a.m. to 5:00 p.m. Eastern Standard Time. Our numbers for calls are:

Toll Free: 800-426-8979 (North America only)

Telephone: 519-836-1291 (Live assistance available 8:30 a.m. to 5:00 p.m. EST, Monday to Friday)

Facsimile: 519-836-4878 (on-line 24 hours)

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ESD Warning



Electronic components and circuits are sensitive to ElectroStatic Discharge (ESD). When handling any circuit board assemblies including Connect Tech COM Express carrier assemblies, it is recommended that ESD safety precautions be observed. ESD safe best practices include, but are not limited to:

- Leaving circuit boards in their antistatic packaging until they are ready to be installed.
- Using a grounded wrist strap when handling circuit boards, at a minimum you should touch a grounded metal object to dissipate any static charge that may be present on you.
- Only handling circuit boards in ESD safe areas, which may include ESD floor and table mats, wrist strap stations and ESD safe lab coats.
- Avoiding handling circuit boards in carpeted areas.
- Try to handle the board by the edges, avoiding contact with components.

Revision History

Revision	Date	Changes
0.00	2016-08-10	Initial release, on version V003
0.01	2016-08-15	Minor edits to release notes document

Introduction

This is release V003 of Connect Tech's board support package for all NVIDIA Jetson TX1 solutions. The list of devices that are supported by this release are listed in the below section.

Compatible Devices & Manuals

Compatible Devices	
ASG001 (Astro)	http://www.connecttech.com/pdf/CTIM-ASG001_Manual.pdf
ASG002 (Elroy)	http://www.connecttech.com/pdf/CTIM-ASG002_Manual.pdf
ASG003 (Orbitty)	http://www.connecttech.com/pdf/CTIM-ASG003_Manual.pdf
ESG501 (Rosie)	http://www.connecttech.com/pdf/CTIM-ESG501_Manual.pdf

Applied Fixes

- PWM fan fix (applied in V002)
- Added CSI cameras for ASG001 and ASG002 (Astro and Elroy, respectively)
- Fixed NVIDIA virtual terminal issue using patch from forum post:
<https://devtalk.nvidia.com/default/topic/946129/switching-to-tty1-6-/?offset=4>

Known Issues

- NVIDIA display issue, where HDMI monitors plugged in below 1080p at boot will not detect correctly. Current workaround is to leave monitors unplugged until Ubuntu is loaded, then plug in monitor, noted in several forum posts similar to this:
<https://devtalk.nvidia.com/default/topic/939571/jetson-tx1/tegra-tx1-hdmi-issue/>
The use of HDMI adapter dongles may also be affected by this, causing no display
- Other NVIDIA noted issues can be found in the official NVIDIA L4T Release Notes at:
<https://developer.nvidia.com/embedded/linux-tegra>

Update Guide

WARNING: When upgrading from CTI-L4T V001 or V002 to V003, the device MUST be updated with R24.1 of NVIDIA's Linux for Tegra. By not following this requirement, the user assumes risk of unintended system behavior and possibly even device failure.

ASG001/ASG003

- Place device in recovery mode. This will be specific to your device, please refer to the user's manual on how to force recovery mode.
- Follow Jetson TX1 Developer Kit User Guide on how to flash the device using JetPack
 - <https://developer.nvidia.com/embedded/linux-tegra>
- Download and extract CTI-L4T-V003
- Run the install script according to your hardware
 - `./install ASG003`
- Reboot the device for changes to take effect