



## GLOBAL FORENSIC TRAINING

Cellebrite Advanced JTAG Extraction (CAJE)

### COURSE DESCRIPTION

**ROCIC**

**November 27th - 30th, 2017**

**545 Marriott Dr, Suite 850, Nashville, TN 37214**

**Cellebrite Advanced JTAG Extraction (CAJE)**

**POC: Jarrett Miller**

**\$3850.00**

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**Level**

Advanced

**Length**

4 days

**Delivery Mode**

Instructor Led  
Training

The new and improved Cellebrite Advanced JTAG Extraction (CAJE) training is an advanced-level four-day course lead by Cellebrite Certified Instructors (CCIs). During this course, participants will learn about the JTAG process, electrical theory, methodologies, and purpose as well as understand the equipment and accessories necessary for successful JTAG extractions. Instructors will help attendees to not only develop, but also to hone fundamental soldering skills, gain practical knowledge with hands-on practice as well as share best practices and legal considerations for processing JTAG extractions. Additionally, participants will learn how to fully leverage the Physical Analyzer in order to properly decode JTAG extractions. As part of their attendance, participants will receive a RIFF 2 JTAG box, a Z3X Pro (Easy JTAG) box, a Molex adapter kit, a class specific tool kit, and a Cellebrite soldering practice board.

[www.cellebritelearningcenter.com](http://www.cellebritelearningcenter.com)

## Cellebrite Advanced JTAG Extraction (CAJE)

| Time and Estimated Time               | Description and Objectives   |
|---------------------------------------|--|
| <b>JTAG Theory</b>                    | <ul style="list-style-type: none"> <li>• Purpose of JTAG</li> <li>• Advantages and Disadvantages</li> <li>• Understanding of Test Access Points/Pads=TAPS</li> <li>• Overview of the Reading Process</li> </ul>  |
| <b>Small Device Electrical Theory</b> | <ul style="list-style-type: none"> <li>• Smartphone File Systems</li> <li>• Flash/NAND/eMMC memory</li> <li>• Tracing</li> <li>• Power Requirements</li> <li>• Damaged devices</li> </ul>  |
| <b>Reference and Research</b>         | <ul style="list-style-type: none"> <li>• Determining if JTAG is an available option</li> <li>• Forums</li> <li>• Websites for TAP Identification</li> <li>• JTAG Finder/Process/Probing –TAP Identification</li> </ul>   |
| <b>Soldering Techniques</b>           | <ul style="list-style-type: none"> <li>• Familiarize and Understanding of Soldering</li> <li>• Safety Considerations for Soldering</li> <li>• Recommend Soldering Techniques</li> <li>• Removal of Solder</li> </ul>   |
| <b>RIFF 2 JTAG Box</b>                | <ul style="list-style-type: none"> <li>• Hands-On Set-Up and Use of RIFF 2 Box</li> <li>• Overview of RIFF 2 Box and Functionality</li> <li>• Warnings or Advisory of the RIFF</li> <li>• Installation/Updates of RIFF Box / Hands-on Practical</li> <li>• Overview of Advanced Features</li> <li>• Walk through Read Process</li> </ul> |
| <b>RIFF 2 JTAG Practical</b>          | <p>Instructor Lead Walk through of the JTAG Process using RIFF, students mirror instructor</p>   |
| <b>Tools and Equipment</b>            | <ul style="list-style-type: none"> <li>• Overview of Additional Boxes</li> <li>• Introduction to Necessary for JTAG Extractions</li> <li>• JTAG JIGS OPTIONS</li> <li>• Beyond the RIFF Box-Other Available Boxes</li> <li>• JTAG Accessories</li> <li>• Additional Training</li> <li>• Molex Connectors for JTAG</li> </ul>             |

## Cellebrite Advanced JTAG Extraction (CAJE)

| Time and Estimated Time                               | Description and Objectives   |
|---|--|
| <b>Forensic Process</b>                               | <ul style="list-style-type: none"> <li>• Recommended Best Practices for JTAG</li> <li>• Acquisition/Hashing/Copy/Rehashing/Validation of BIN</li> <li>• Legal Considerations</li> <li>• Presenting and Testifying to JTAG Evidence</li> </ul>  |
| <b>Z3X Pro Box</b>                                    | <ul style="list-style-type: none"> <li>• Hands-On Set-Up and Use of Z3X Pro Box</li> <li>• Overview of Z3X Pro Box and Functionality</li> <li>• Warnings or Advisory of the Z3X</li> <li>• Installation/Updates of Z3X Box / Hands-on Practical</li> <li>• Overview of ISP Features and board</li> <li>• Walk through Read JTAG/ISP Process</li> </ul> |
| <b>Z3X Pro JTAG Practical</b>                         | Instructor Lead Walk through of the JTAG Process using Z3X. Students mirror instructor.  |
| <b>Introduction to UFED Physical Analyzer</b>         | <ul style="list-style-type: none"> <li>• Advanced Features</li> <li>• Chains</li> <li>• Reconstructing the File System</li> <li>• Password Recovery</li> <li>• Working with JTAG Extractions</li> </ul>  |
| <b>Validation and Reporting on Technical Findings</b> | <ul style="list-style-type: none"> <li>• Validation Methods</li> <li>• Reporting Elements for Mobile Device Forensics</li> </ul>   |
| <b>Student Practical</b>                              | Using either Z3X Pro or Riff Box, JTAG a mobile device. Students work independently.   |

To learn more, visit [www.cellebritelearningcenter.com](http://www.cellebritelearningcenter.com)

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## DIRECTIONS AND HOTEL RECOMMENDATIONS



**ROCIC James T. Rogers Training Room**  
**545 Marriott Drive, 8<sup>th</sup> floor**  
**Nashville, TN 37214**

**From North:**

Take 65 South toward Nashville  
Take Exit 90 B, Briley Parkway East  
Take Exit 7, Elm Hill Pike and turn left off of the exit  
Turn right at second traffic light (Marriott Dr.)  
ROCIC is in the second building on the left  
(Building “Three”), 8th Floor

**From South:**

Take 65 North toward Nashville  
Pick up 440 East toward Knoxville  
When 440 ends, get on 40 East  
Exit Briley Pkwy North (2nd Briley Pkwy Exit)  
Take Exit 7, Elm Hill Pike and turn right off of the exit  
Turn right at first traffic light (Marriott Drive)  
ROCIC is in the second building on the left  
(Building “Three”), 8th Floor

**From Knoxville or Nashville Airport:**

Take 40 West toward Nashville  
Exit Briley Pkwy North  
Take Exit 7, Elm Hill Pike and turn right off of the exit  
Turn right at the first traffic light (Marriott Drive)  
ROCIC is in the second building on the left (Building “Three”),  
8th Floor

**From Memphis:**

Take 40 East toward Nashville  
Pick up 440 East toward Knoxville  
When 440 ends, get back on 40 East  
Exit Briley Pkwy North (the 2nd Briley Pkwy Exit)  
Take Exit 7, Elm Hill Pike and turn right off of the exit  
Turn right at the first traffic light (Marriott Drive)  
ROCIC is in the second building on the left (Building “Three”),  
8th Floor

**From Chattanooga:**

Take 24 West toward Nashville  
Exit Briley Pkwy North (2nd Briley Pkwy Exit)  
Take Exit 7, Elm Hill Pike and turn right off of the exit  
Turn right at the first traffic light (Marriott Drive)  
ROCIC is in the second building on the left (Building “Three”),  
8th Floor

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**Doubletree Nashville Airport Hotel - (.9 miles)**

**2424 Atrium Way, Nashville, TN 37214**

The Doubletree is ROCIC’s recommended hotel. Rooms are available at the Doubletree Nashville Airport Hotel at a discounted ROCIC rate of \$119 + tax. This rate includes complimentary breakfast and shuttle service.

**To book reservations at the Doubletree Nashville Airport Hotel:**

- **By Phone: (615) 889-8889; Reference ROCIC Corporate Account # 0560076397**
- **Online: [CLICK HERE for the Doubletree Website](#)**
  - Enter Dates and room information
  - Click “add special rate code”
  - Copy and Paste this code 0560076397 in the Corporate Account box

**Other Area Hotels:**

**Nashville Airport Marriott - (.3 miles)**

600 Marriott Drive, Nashville, TN 37214

To book reservations at the Marriott call: (615) 889-9300

**Embassy Suites Nashville Airport Hotel - (1.19 miles)**

10 Century Blvd., Nashville, TN 37214

To book reservations at the Embassy Suites call: (615) 871-0033

**Homewood Suites by Hilton Nashville-Airport - (1.42 miles)**

2640 Elm Hill Pike, Nashville, TN 37214

To book reservations at the Homewood Suites call: (615) 884-8111