

2D Barcode Top Marking Introduction

Rev. 0723



Situation Overview:

The topside marking of Mach™-NX, CertusPro™-NX, and other future commercial/industrial and automotive devices with packages $\geq 9 \times 9$ mm will feature a 2D barcode. This will improve product traceability by allowing direct access to part/device process history through the Lattice Link™ Web Portal and Mobile App.

The 2D barcode contains a combination of numbers and characters that can be scanned to determine the product's unique ID. The device's product code, speed, grade, and package code that were found previously on the top marking can only be retrieved through the Lattice Link internet-based application either on a mobile device or through a web browser. Scanning the 2D barcode or entering the Lot ID provided on the top mark to the web portal will allow access to all the product information.

FAQs:

Q1: What is happening?

Lattice is adding a 2D barcode to Mach™-NX, CertusPro™-NX, and other future series of commercial/industrial and automotive devices on packages $\geq 9 \times 9$ mm.

Q2: What happens to products that have already been released?

If Lattice decides to use 2D barcode in released products, a PCN will be issued to customers.

Q3: What is 2D barcode marking?

The 2D barcode marking is a serialized identifier unique to each unit marked on top of the device. The device information and details can only be retrieved from either a Lattice Link web portal or a mobile application.

Q4: Why is Lattice making these changes?

Lattice is making this change to improve device-level traceability and security.

Q5: What is the benefit to customers?

This change will improve traceability. Customers will have direct access to part/device process history.

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Q6: Which products are affected?

This change affects all package, speed, and grade variations of Mach™-NX, CertusPro™-NX, and other future series of commercial/industrial and automotive devices on packages $\geq 9 \times 9$ mm. All new Lattice products will include the updated markings upon initial release.

Q7: When will this change take effect?

The new top mark format with 2D barcode marked on top of the unit took effect since Dec. 2021 for Mach-NX and Jan. 2022 for CertusPro-NX.

Q8: Does this change affect material qualification?

No. This change does not affect the reliability of the product.

Q9: What do customers have to do in response to this announcement?

Customers are encouraged to review internal inspection and manufacturing practices to ensure the new 2D marking can be fully integrated.

Q10: What information is removed from the standard marking?

Line 3 – Product Code

Line 4 – Speed, Grade, Package Code

Q11: How big is the barcode?

The barcode is a Data Matrix ECC-200 with dimensions of 3 x 3 mm or 2.24 x 2.24 mm depending on the package dimension/marketing area.

Q12: How will the 2D barcode be marked?

The 2D barcode is laser marked.

Q13: How can a customer access the device information?

There are 3 methods to retrieve the device information.

1. Use the Lot ID on the top mark to search using the [Lattice Link Web Portal](#).
2. Use the 2D code ID scanned using any barcode scanner or app to search using the [Lattice Link Web Portal](#).
3. Scan the 2D barcode on the top mark using the Lattice Link Mobile App (available in [Google Play store](#) or [Apple app store](#)).

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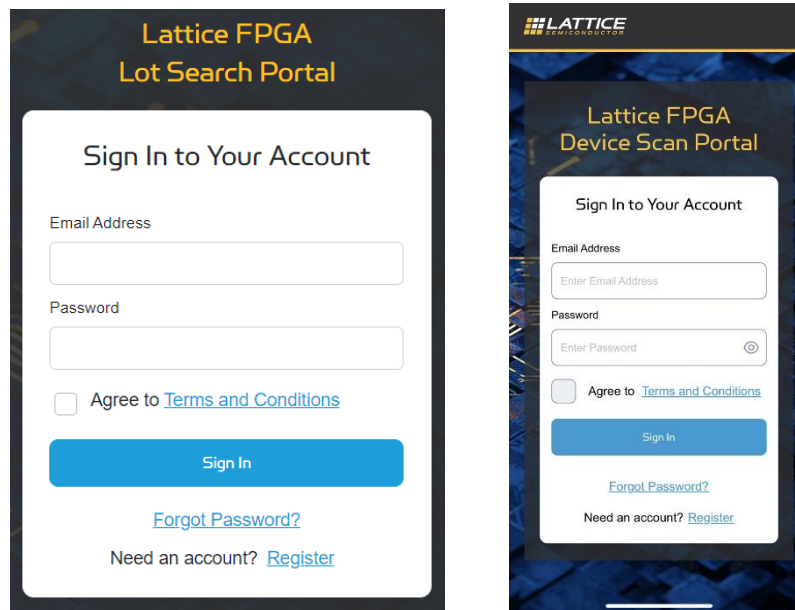
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Q14: How can a customer get access on the Lattice Link web portal or mobile app?

Below are the steps to follow:

Use this link to access the web portal: <https://latticelink.latticesemi.com/signin> or download the Lattice Link app from the [Google Play store](#) or [Apple app store](#).



1. Click Register to proceed. Provide the detailed information as shown below.

4. User will receive an email that includes a default password and link to change password. Users are recommended to change to a preferred password for security purposes.
5. Use the username and password to sign in on both the Lattice Link web portal and mobile app.

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Q15: What are the steps to retrieve device information using the Lattice Link web portal?

1. Open the Lattice Link web portal using the following link
<https://lattice.link.latticesemi.com/signin>
2. Sign in using your username and password.
 - a. If you forgot the password, click the 'Forgot Password?' link and an email will be sent with a new default password. We recommended users to change the default password for security purposes.

The screenshot shows the 'Sign In to Your Account' page of the Lattice FPGA Lot Search Portal. It features a dark header with the title in yellow. The main content area is white and contains fields for 'Email Address' and 'Password'. Below these is a checkbox for 'Agree to Terms and Conditions' with a link to the terms. A blue 'Sign In' button is positioned below the checkbox. At the bottom, there are links for 'Forgot Password?' and 'Need an account? Register'.

3. Type the Lot ID found on the top mark of the unit or the 2D Code ID from scanned unit using any barcode scanner/app and then click search or press enter.

This screenshot shows the search interface for Lot IDs. It has a light blue background. At the top, it says 'Search By' followed by a dropdown menu currently set to 'Lot ID'. Below the dropdown is a text input field labeled 'Search' and a blue 'Search' button. At the bottom, there is a hint: 'Enter Lot ID (Example: 1050TT01)'.

This screenshot shows the search interface for 2D Code IDs. It has a light blue background. At the top, it says 'Search By' followed by a dropdown menu currently set to '2D Code ID'. Below the dropdown is a text input field labeled 'Search' and a blue 'Search' button. At the bottom, there is a hint: 'Enter 2D Code ID(Example: 2221LCXX000001)'.

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4. Search result will display the product information based on lot ID or 2D code ID query.

Search By

Lot ID

A2032T11

Search

Enter Lot ID (Example: 1050TT01)

Product Information

Lot ID	A2032T11
Product Code	LFCPNX-100
Package Code	BBG484
MSL/Peak Temp Max	3/260
Assy Site	TW
Date Code	2203

Search By

2D Code ID

2206LC64002414

Search

Enter 2D Code ID(Example: 2221LCXX000001)

Product Information

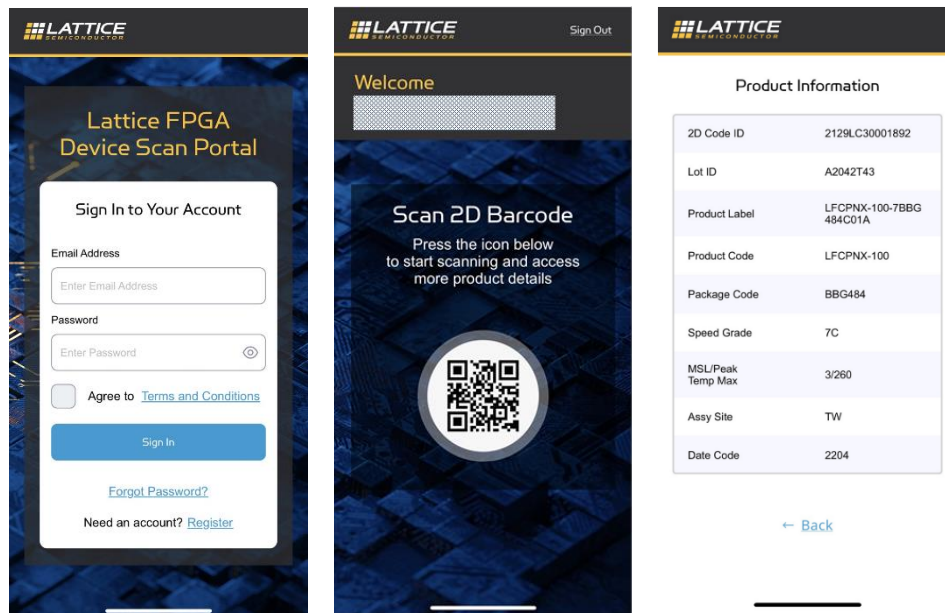
2D Code ID	2206LC64002414
Lot ID	A2032T11
Product Label	LFCPNX-100-7BBG484C01A
Product Code	LFCPNX-100
Package Code	BBG484
Speed Grade	7C
MSL/Peak Temp Max	3/260
Assy Site	TW
Date Code	2203

Q16: What are the steps to retrieve the device information using the Lattice Link mobile app?

1. Download the Lattice Link mobile app in [Google Play store](#) or [Apple app store](#)..
2. Open the app and sign in your account.
3. Press the 2D barcode icon to start scanning.
4. Scan the 2D barcode on the top mark of each unit to retrieve the product details.
5. Search result will display the product information.

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Q17: Who will support customer questions regarding the application?

Please submit a service request via LatticeLink@latticesemi.com and describe the problem encountered.

Q18: Does a customer have to keep signing in?

For security purposes, the Lattice Link web and mobile application will automatically sign out a user after 30 minutes of inactivity.

Q19: My company does not allow access to phones or internet? How can they look-up device information?

Customers can use the box label for lot details. Contact the Lattice team through LatticeLink@latticesemi.com to get the other information, as needed.