Zebra® ZXP Series 9[™] FREQUENTLY ASKED QUESTIONS



1. WHAT IS RETRANSFER PRINTING?

Retransfer technology uses a two-step process called reverse thermal transfer. Unlike the direct-to-card print (DTC) process, the retransfer process prints a high-resolution image in reverse directly onto a clear receiving layer carried by a flexible, intermediate film. The dye diffusion process prints the image to the film and then uses heat and pressure to thermally transfer the image and the entire image-receiving intermediate film onto the card surface. The printed image resides underneath the clear image-receiving layer, inside the card.

Retransfer technology delivers high print quality and the ability to print on uneven card surfaces such as smart cards, and on non-PVC cards, for a more durable and abrasion-resistant card that lasts longer than traditional materials.

Benefits of retransfer print technology include:

- Superior image quality. Separates the image creation step from the process of applying the image to the card, relieving many of the constraints of DTC printing, and optimizes the dye for print quality—regardless of card material.
- **Greater flexibility.** Over-the-edge printing enables true edge-to-edge images, giving users access to the entire card surface. The retransfer process is relatively insensitive to card materials allowing for high-quality images on a wide variety of card types such as biodegradable cards enabling "green" initiatives.
- **Improved security.** The transfer film provides fraud protection since the film easily shows tamper evidence. Retransfer technology allows the use of transfer films with holographic images and laminates with a multitude of security features such as holographic images, optical variable ink, and morphing.
- Lower printhead costs. Printhead lifespan improves dramatically because retransfer printers print on soft transfer film panels and not
 on rigid card substrates as with traditional DTC printers—resulting in a reduction in overhead for spare printheads, lowered
 maintenance workload and improved ROI.

2. WHY DO CUSTOMERS WANT A RETRANSFER PRINTER? WHY SHOULD THEY BUY A ZXP SERIES 9?

Customers looking for increased security in printed cards, along with a more durable and long-lasting product, will benefit using a retransfer printer. Additionally, retransfer printers offer higher print quality, producing photo-like identification cards with rich colors that are true edge-to-edge (no white border around the cards).

Zebra's ZXP Series 9 is a best-in-class retransfer printer. Engineered for quality, the printer is dependable, and it's backed by Zebra's outstanding support and industry reputation. As a global organization, Zebra is always there to offer top service, integration and lifecycle support.

3. WHAT MAKES THE ZXP SERIES 9 IDEAL FOR HIGH-SECURITY APPLICATIONS?

The need for retransfer printing is real. Ever-increasing emphasis on security, flexibility and efficiency requires organizations to produce cards with the highest photo-like image quality, utilize a diverse range of card materials and support the broadest array of chip-encoding options for high-security government ID cards, retail loyalty cards and financial cards.

The ZXP Series 9 is engineered with retransfer technology, which is the optimal on-demand printing solution for meeting stringent image quality and encoding standards required for advanced card applications. Retransfer technology allows for printing on uneven card surfaces, fraud protection (the film easily shows tamper evidence), more durable and abrasion-resistant cards and more detail and sharper images (with more accurate pixel placement).

And, the use of lamination technology found in the ZXP Series 9, along with retransfer technology, provides additional card security and exceptional durability. Single-sided or simultaneous dual-sided lamination helps prevent counterfeiting and the alteration and duplication of cards. Standard clear and holographic random or registered laminates are difficult to forge and prevent image fading and dye migration—prolonging the card's life. Zebra also offers custom holographic laminates, which can further deter forgery when specialized card security is required.



4. WHAT IS THE ZXP SERIES 9 CARD PRINTER?

The Zebra ZXP Series 9 printer is based on leading-edge hardware and software technology that meets demanding enterprise needs for high-performance, photo-quality card printing. It uses retransfer technology that is the optimal on-demand printing solution for meeting the stringent image quality and encoding standards that advanced card applications require. Retransfer printing with the ZXP Series 9 printer is ideal for a broad range of applications such as:

- US Federal Government IDs: PIV, CAC, TWIC cards, Local Law Enforcement IDs
- · Government IDs
- Government-issued IDs and Cards: Drivers Licenses, Residency Cards, Voter Registration Cards, Health Cards, Gun Licenses
- ID and Access Control: Student, Staff and Personnel
- · Employee, Student IDs
- · Personalized Gift, Membership and Loyalty Cards
- · Smart Cards in Travel, Gaming and Entertainment
- · Personalized Gift, Membership and Loyalty Cards
- · Other Customized Cards

5. IS THE ZXP SERIES 9 COST COMPETITIVE?

Yes, competitively priced, the ZXP Series 9 with Zebra's patented waste-free laminate design also eliminates more than 50% of the waste compared to competitor laminates, and enables cost savings of more than 30% over the competition to give users an extremely low cost per card. Also, the ZXP Series 9 will be priced comparatively to the ZXP Series 8, which it is replacing.

6. HOW IS THE ZXP SERIES 9 POSITIONED WITHIN THE CARD PRODUCT LINE?

The ZXP Series 9 is Zebra's "premium" retransfer card printer. It is best in class and delivers exceptional quality and features.

7. HOW DOES THE ZXP SERIES 9 COMPARE TO THE ZXP SERIES 7 PRINTER?

The ZXP Series 9 printer is a retransfer printer that provides true edge-to-edge printing with no white border, exceptionally durable and long-lasting printed cards and photo-quality printing. The ZXP Series 7 is a direct-to-card printer.

While both the ZXP Series 7 and ZXP Series 9 are well suited for small Service Bureau applications, the ZXP Series 7 offers a ZXP Series 7 Pro option with a high-capacity hopper and output tray, along with associated software.

While both ZXP Series 7 and ZXP Series 9 printers can encode contact and contactless (MIFARE/HF), the ZXP Series 7 also offers an option to encode Ultra High Frequency (UHF) cards.

8. HOW IS THE ZXP SERIES 9 DIFFERENT FROM THE ZXP SERIES 8™?

Building on the learnings, improvements and industry-leading features of the ZXP Series 8, Zebra's ZXP Series 9 delivers greatly improved quality and dependability with **more options** and a new **user-selectable print quality mode** that enables users to select between two print quality optimization modes: Standard and Fine.

This new print quality mode option gives users the flexibility to control card printing. They can produce more cards faster with the "Standard" print mode, or select the "Fine" print quality mode to produce cards with even more exceptional quality with slightly lower print speeds.



Additionally, "first card out" card quality improvements deliver consistent, quality cards and reduce waste. Users experience consistent print quality on cards printed from a cold start, reducing wasted cards and other supplies.

The ZXP Series 9 also delivers added features and benefits in the driver and toolbox including:

- More intuitive Driver and Toolbox to improve the customer experience
- · Certified Windows® driver, enhanced toolbox for consolidated view of all aspects of the ZXP Series 9 printer, options and settings
- New user interface improvements make it easier to set up and configure all aspects of the ZXP Series 9 operations

The ZXP Series 9 gives users immediate information and support with **Print Touch™** and **QR Code technology**. And, it is engineered using the new common industrial design features (**Global Product Design Language: GPDL**), so it looks different than the ZXP Series 8 and matches the look and feel of the card printer line.

9. WHAT IS ZEBRA'S COLOR PREDICTIVE TECHNOLOGY?

Zebra's Color Predictive Technology is based on proven, patented image processing algorithms to deliver exceptional print quality. Zebra's CPT is included on all of Zebra's ZXP Series card printers. This tested and proven technology enables a customer's printer to constantly monitor and assess images and file content, automatically calculate and make needed adjustments in real time to ensure the printer produces the highest print quality and ideal images every time. This function happens inherently within the printer—no operator oversight is required.

10. THE ZXP SERIES 9 IS ONLY 300 DPI. DON'T I NEED 600 DPI?

Print quality is measured by the eye; not dpi. Print quality is often thought to be dependent on resolution; however, resolution is only one aspect. When printing a color image via dye diffusion, dyes permeate, spread, and mix in the dye-receptive layer of the transfer film. The printer is not transferring discrete dots of ink, so 600 dpi is no better than 300 dpi. Resolution is most noticeable on monochrome text, especially small fonts printed using mass transfer media.

Print quality is one of the main reasons a customer selects a retransfer printer. The ZXP Series 8 with its Color Predictive Technology earned a reputation of printing some of the best retransfer card images in the industry. This serves as the foundation for the ZXP Series 9. The ZXP Series 9 offers user-selectable print modes. Customers looking for the best print quality – color or monochrome – should opt for Fine Print mode. The subtle adjustments made when printing in Fine Print mode enhance the effectiveness of the Color Predictive Technology, producing photo-like images that are as good as or better than competitive 600 dpi printers.

11. THE ZXP SERIES 8 HAD CHALLENGES. ARE THESE RESOLVED IN THE ZXP SERIES 9?

While the ZXP Series 8 printer had quality challenges, Zebra carefully reviewed and resolved customer issues through both firmware and hardware improvements. The ZXP Series 9 is a new printer. It has been engineered with careful attention and oversight to avoid the challenges of the ZXP Series 8, and to offer enhancements and additional features. The new ZXP Series 9 incorporates improvements to the transfer station, laminator, mag encoder and first-card-out process. Zebra has extensive quality control testing and production processes in place to ensure every product we produce is dependable. The new ZXP Series 9 features outstanding quality, new print options, advanced connectivity and proven dependability.

12. WHAT OPTIONS WILL BE AVAILABLE ON THE PRINTER?

- User-selectable Print Optimization Mode
- ISO HICO/LoCo magnetic stripe encoding
- MIFARE® contactless and contact encoder combo
- · Contact station for third-party contact encoders
- · Lockable enclosure/card feeder
- Single- and dual-sided laminator (available with dual-sided printers only)



13. WHAT OPTIONS ARE FIELD UPGRADEABLE ON THE ZXP SERIES 9 PRINTER?

- · MIFARE contactless and contact encoder
- · Single-sided laminator
- · Dual-sided laminator
- Wi-Fi® network option (US only)

14. WHAT DOES A FIELD-UPGRADEABLE OPTION MEAN?

Intended for installation by qualified partners and technicians, customers can order upgrade kits including parts and instructions on how to perform the installation. Please consult the regional price list for option information.

15. CAN THE PREVIOUS ZXP SERIES 8 PRINTER BE UPDATED TO INCLUDE THE FEATURES OF THE ZXP SERIES 9?

No, the previous ZXP Series 8 model cannot be retrofitted. The printer includes a new design and additional features.

16. CAN YOU USE THE ZXP SERIES 8 FIELD-UPGRADEABLE KITS FOR THE ZXP SERIES 9?

No, the ZXP Series 8 Kits cannot be used in the ZXP Series 9 printer.

17. WILL THERE BE A CHANGE IN PART NUMBERS AND KITS FOR THE NEW ZXP SERIES 9?

Yes. As the ZXP Series 9 is a new printer, there will be new part numbers and kits.

18. WILL THE NEW ZXP SERIES 9 PRINTER BE PRICED DIFFERENTLY THAN THE PREVIOUS ZXP SERIES 8 MODEL?

Zebra's new ZXP Series 9 will be priced comparatively to the ZXP Series 8.

19. WHAT ARE THE SKUS?

The most commonly ordered generic ZXP Series 9 printer SKUs are:

SKU	Product
Z91-000C0000XX00	Single-side Printer
Z91-0M0C0000XX00	Single-side Printer with Magnetic Encoder
Z92-000C0000XX00	Dual-side Printer
Z92-0M0C0000XX00	Dual-side Printer with Magnetic Encoder
Z93-000C0000XX00	Dual-side Printer, Single-side Lamination
Z93-0M0C0000XX00	Dual-side Printer with Magnetic Encoder, Single-side Lamination
Z94-000C0000XX00	Dual-side Printer, Dual-side Lamination
Z94-0M0C0000XX00	Dual-side Printer with Magnetic Encoder, Dual-side Lamination

For specific, Regional SKUs, please refer to your Regional Card Printer Price List.



20. IS A SECURE ISSUANCE VERSION AVAILABLE ON THE ZXP SERIES 9?

No. The more advanced locking mechanisms and encryption features used in financial applications are not available on the ZXP Series 9 at this time. Please contact your card printer specialist with questions.

21. ARE MY CURRENT ZXP SERIES 8 RIBBONS COMPATIBLE WITH THE ZXP SERIES 9?

Yes. All media for the ZXP Series 8 is compatible with the ZXP Series 9 including ribbons, laminate and cleaning supplies. Newly branded media will be compatible with both the ZXP Series 8 and 9.

22. WHAT RIBBONS ARE AVAILABLE?

True Colours® i Series™ Print Ribbons			
Part Number	Description	Images per roll	
800012-445	Zebra i Series Color Ribbon for Retransfer, 4 Panel YMCK, 625 images	625	
800012-480	Zebra i Series Color Ribbon for Retransfer, 5 Panel YMCKK, 500 images	500	
800012-543	Zebra i Series Color Ribbon for Retransfer, 5 Panel YMCUvK, 500 images	500	
800012-901	Zebra i Series Monochrome Black Ribbon for Retransfer, 2500 images	2500	
800012-942	Zebra i Series Color Ribbon for Retransfer, 5 Panel YMCKI, 500 images	500	
800012-944	Zebra i Series Color Ribbon for Retransfer, 6 Panel YMCKKI, 415 images	415	
800012-141	Zebra i Series Color Ribbon for Retransfer, 3 Panel YMC, 800 images	800	
True Colours® i Series™ Transfer Film			
Part Number	Description	Images per roll	
800012-601	Zebra i Series Transfer Film Clear, 1250 images (single-sided), 625 images (dual-sided)	1250 / 625	

23. HOW DO I GET A CUSTOM LAMINATE QUOTE?

Customers looking for custom laminate supplies can obtain further information from Zebra's **Custom Laminate Quote Request Form**, and through their service representative.

24. WHAT CARDS ARE COMPATIBLE WITH THE ZEBRA ZXP SERIES 9 PRINTER?

- Card material: PVC and composite, ABS cards, PET, PET-G, and Teslin® composite**
- Specialty cards: Transparent (IR-blocked) or translucent card 30 mil (clear and colored)**
- Technology cards: Contact and contactless smart cards, UHF cards**

^{**} Please contact your Zebra reseller for qualification of cards



25. WHAT VERSION OF FIRMWARE AND DRIVERS ARE AVAILABLE? WHERE CAN CUSTOMERS ACCESS THEM?

The following versions of Firmware and Drivers will be available for the ZXP Series 9:

Product	Version	Availability
Firmware	1.01.00	Pre-installed on the printer
Driver	1.00.00	User CD (ships with the printer); accessible from Zebra.com product support page

Please note: ZXP Series 9 drivers will be different from the ZXP Series 8. Firmware is not backwards compatible.

26. WHAT DOES ZEBRA'S SUPPORT INCLUDE?

Zebra OneCare™ Service – Customers can increase printer uptime, and reduce lost productivity and unbudgeted repair costs, by selecting a Zebra OneCare service agreement. A cost-effective means of planning and budgeting annual maintenance expenditures, these agreements ensure that trained Zebra technicians will bring printers back to factory specifications. Zebra offers a variety of plans to fit customers' budgets and business needs. For additional information on available services, please visit Zebra's website: https://www.zebra.com/zebraonecare

Free Card Testing Support – Customers can gain complimentary card-testing support and guidance from skilled Zebra professionals. For additional information, contact Zebra via email at cardtestingservice@zebra.com or call (866) 569-9086.

27. HOW DO I GET A CUSTOMER'S PROVIDED CARD TESTED? WHAT IS THE CARD TESTING SERVICE AND HOW DOES IT WORK?

Zebra offers a free card testing service for customers. To have a card tested, please use the Card Optimization Request Form, including all required information along with a summary of test requirements. Submit the form to CardTestingService@Zebra.com, and a Zebra representative will be in touch within three days of form submission.

28. WHAT SOFTWARE IS AVAILABLE?

The ZXP Series 9 includes a Microsoft® Certified Windows driver CD. The ZXP Series 9 includes support for both a Windows-based SDK (ZXP Series 7, ZXP Series 8 and ZXP Series 9, ZMotif™ SDK) and a new Link-OS®-based common Java SDK. Both SDKs are available at no cost from www.zebra.com under Card printer software, developer tools.

ZXP Series 9 is supported by Zebra CardStudio™ application software for easy to use Card Design and Issuance.

Large network based deployments of ZXP Series 9 printers can also benefit from Zebra Virtual PrintWare which includes PrintMonitor for monitoring network-based card printers from a single network application console. In addition, PrintManager allows users to easily integrate local and distributed-based card printing and issuance into Mobile and Legacy applications with XML text-based template printing.

29. WHEN DOES A CUSTOMER NEED TO USE THE SDK?

The ZMotif or Link-OS Java-based SDK allows system integrators or application developers to integrate card printing and issuance directly into their application. The SDK is also required to add any smart card encoding capability into a card print-and-encode application.



30. WHO IS QUALIFIED TO SELL AND SUPPORT THE ZXP SERIES 9 PRINTER?

As a specialty printer, the ZXP Series 9 is available through Zebra Card Partner Specialists.

31. WHAT ARE THE STANDARD FEATURES OF THE ZXP SERIES 9 PRINTER?

- · USB and Ethernet connectivity
- · Single-card feed capability
- 150 card capacity feeder (30 mil)
- 15 card reject hopper (30 mil)
- 100 card output hopper (30 mil)
- i Series[™] intelligent media technology
- · Auto-calibration of media
- 21-character, 6 line LCD operator display
- 304 dpi (12.0 dots/mm) print resolution
- · 64 MB memory standard
- · Lifetime warranty on printhead
- · 2-year limited warranty on printer
- · Microsoft Windows certified drivers
- · Kensington physical lock capable

32. WHAT COMES IN THE BOX?

- · ZXP Series 9 Printer
- · Card Hopper
- Output Tray
- · Cleaning Cassette
- · Instruction Manual CD including:
 - User Guide
 - Driver and Firmware
- · Quick Start Guide
- Registration Card
- Sample Test Card
- · Complimentary 100-card Pack
- Power Cord
- USB Cable
- Laminator Cassettes—available with optional Laminator model only



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