Card Design Template
Building a card design for Instant Issuance

Instant issuance meets the increasing need to provide a personalized customer experience by producing a variety of personalized card options that deliver instant issuance of permanent Visa® and MasterCard® credit and debit cards, ATM and gift cards. MagTek’s comprehensive security ensures reliable issuance, reading, transmission and safety of cards, PINs and identification documents.

MagTek knows that designing your own instant issuance cards can be a challenging task. That is why we have created this card design document to help you design your own cards, and better understand what card formats you need in order to produce beautiful custom cards that distinguish you from your competitors.

No matter which ExpressCard Card Personalization Device you are using, we can help get you started. Our devices can securely, fully personalize CR80-sized credit, debit, ATM, gift, loyalty, or membership card in as little as 90 seconds. Personalization can include embossing, indent printing, foil tipping, and full-color image printing (depending on the device you select).

PLEASE NOTE: the following are guidelines to better assist you in your card personalization program. Your card brand and card stock production house will have their own set of guidelines and specifications that you will need to follow. YOU MUST CONFIRM ALL DESIGN DETAILS WITH THEM PRIOR TO PROCESSING PERSONALIZED CARDS.
Card Template
Create a card template at-size either vertical or horizontal. The template should be 3.375” x 2.125” rectangle for horizontal cards or 2.125 x 3.375” for vertical cards. Do not add a rounded corner radius for the card print design. The corners must be square.

DPI and Color Mode
The image must be 300 dpi, the color mode must be CMYK. PLEASE NOTE: if you use colored card stock, it will change the color of any elements that you lay on top and any white elements will be the color of the card stock.

Institution & Account Description
Place your brand and logo elements on the card. Your logo is a key element of your card design and should be placed prominently on the card. The logo should be 300 dpi at final size, or for best results use Vector artwork. Be sure to avoid all embossing, and other card element areas.

Account Information
Sometimes there are additional details that are required. Depending on your card type, or card brand there may be other card elements or certain account details that are required on your card.

Some elements to consider:
- First 4-digits of BIN: The first 4-digits of the card Bank Identification Number may be required on your cards. It is typically placed just under where the personal account number is printed or embossed. Sometimes this is indent printed.
- Expiration text (good thru, exp date, expiry, valid thru, month/year).
- Membership text (card member since, cardholder since, member since) can be placed in different areas on the card.
- Account type detail (debit, business, electronic use only) is placed per the card brand and card type requirements.

Blocking Regions
Certain elements come pre-printed or embedded in your “blank” card stock. If you ordered your card stock with any pre-printed or embedded elements, be certain to place a blocking region (a white box) in your artwork. Blocking regions should be created 2 mm larger than the actual region as there is a small amount of shift per card grab during production. Please be certain to get the exact measured placement and sizing of these elements from your card stock production house. Inaccurate sizing or placement will result in poor production.

Some blocking regions to consider:
- Card Brand Mark: The actual card brand logo bug (e.g. Visa, MasterCard, Discover). The blocking region for these varies, please review card brand specifications.
- Holograms: card brands determine hologram placement if they apply. Please check with your card manufacturer as to the exact measurements: x/y coordinates, corner radius and size.

Framing
- There may be a very slight white border in the production of your artwork. This frames the artwork and card image.
- If you are issuing EMV Chip cards, it is recommended to make your blocking region 2 mm larger than the actual chip to accommodate for shift that can occur in any instant issuance device.

Card Details
Cardholder data includes (but is not limited to) primary account number (PAN), cardholder name (first, middle initial and last), expiration dates (month/year), member year, business name, etc. Check with your card brand requirements to see if there are color, placement and sizing restrictions. The ExpressCard devices have industry standard default ranges.

Production Ready Artwork
ALL ARTWORK MUST BE APPROVED BY YOUR CARD BRAND.
Sample Card Template

Not every card is manufactured the same. There are variances within the card brand, but this should help you get started.

4-digit PAN

The example shown here is approximately placed 10mm from the left edge of the card and 15mm from the bottom of the card, the font is a sans serif font (Arial or Helvetica are standard) at 6 point. Please check with the card brand regarding requirements.

Expiration Text

The "Good Thru" is shown 40mm from the top edge of the card and 30mm from the left edge of the card. Typically this text is: in the same color as the First 4-digits; in all caps; in a sans serif font (Helvetica or Arial); approximately 4.5 point; and placed directly above or directly to the left of the printed expiry date.

EMV Chip

The blocking region for these varies and will depend on your card vendor, whether you have a 6-pin or 8-pin chip and other variances. Please review card brand specifications provided by your card manufacturer.

Card Type

Typically this text is: in the same color as the 4-digits and in all caps. Placement, font and sizing need to be confirmed with the card brand specifications. The example shown here is in Helvetica at 12 point and aligned with the right edge of the Visa rectangle.

Member since

Typically this text is: in the same color as the PAN; in all caps in a sans serif font (Helvetica or Arial); approximately 4.5 point; two lines of text; left justified or centered; and placed on the bottom third of the card.

Visa® Debit blocking region

Create a rectangle that is 21.6mm x 8.967mm. Place it 3.05mm from the right most edge and 3.00 mm from the bottom most edge. Variances are possible.

MasterCard blocking region

Place blocking oval 3mm from the right edge of the card and 2 mm from the bottom edge of the card.

Chip location and sizing will vary. Please contact your card manufacturer and request chip location and sizing. See examples below.

- Chip Size: .4591” x .3692”
- 3/8” (.375”)
- 11/16” (.6875”)

Knockout Box: 2mm clearance from EMV Chip

A fun way to design for variances is to add a white or soft element around the chip.
Artwork Recommendations

**Dye Sublimation**
Dye Sublimation is a printing process that uses heat to transfer ink to the card, embedding the image into the card instead of just placing the image on top of the card. The sublimation process is designed to produce a pleasing representation – not an exact match – of the original. Some color variation from a color target is normal and expected.

**Art Format**
Artwork needs to be saved as a JPG file. Color mode should be set to CMYK at 24 bits/ channel. Image resolution and size should be set to 1016 x 648 pixels with a 300 DPI design. Black should be: 60%C, 40%M, 40%Y, 100%K. Corners should maintain a 90° angle with no rounding.

**Gradients and Transparencies**
Gradient art should be created in Photoshop. Gradients should NOT be produced in vector art (e.g. Adobe Illustrator), nor should one use the transparencies or shadow features in Adobe Illustrator. These often create unpredictable rip/print problems, including color banding and distortion.

Transparencies are not recommended as they do not translate well. If used, be certain to flatten the file and use a transparency greater than 30%. Half tones and percentages are acceptable but should not be less than thirty percent (30%).

**File Format**
Save all raster (photo) images as uncompressed TIFF file(s) and then save again as a JPG file.

**Dot Gain and Blocking Regions**
Dye sublimation is a heat activated ink transfer process that produces dot gain. This means there may be some “bleeding: which impacts all reversed or “knocked out” art (when you put white text on a colored background, since white is not a color option and merely just the blank card space). When reversed elements are too small, the dot gain may fill in the reversed area or eliminate it completely. For this reason, we recommend all reversed type be set to bold. Serif fonts such as Times should be set at 18 point or greater and sans serif fonts like Helvetica should be set at 12 point or greater. All reversed lines should be 1.5 points or greater.

Blocking regions should have a 2mm variance range.

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**ALL ARTWORK MUST BE APPROVED BY YOUR CARD BRAND.**

**Logo**
- Correct placement
- Vector art format or 300 dpi

**Account Information**
Does your card require the first 4-digits of the PAN
- Check size, color and location

Does your card require expiration text
- Check size, color, location and text

Does your card require membership details
- Check size, color, location and text

Does your card require additional account detail
- Check size, color, location and text

**Blocking Regions**
Have you created blocking regions for any pre-printed or embedded elements in your card stock
- Have you checked size and placement
- The blocking region around the EMV chip is 2mm more than the size of the chip on all sides.

The following items should NOT be included on card templates when designing:

Images of smartcard chips
- These are embedded in your card stock

Images of holograms
- These are embedded in your card stock

Images of card brand logos
- These are pre-printed on your card stock

**Cardholder Information**
- This will be personalized on your cards at the time of card processing