

# Short Circuit

Companion Pattern for Studio 180 Design's Rapid Fire® Hunter's Star - Large Star Tool



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Companion Pattern for Studio 180 Design's  
Rapid Fire® Hunter's Star - Large Star Tool

Quilt Designed by Sarah Furrer, Studio 180 Design  
Recommended Tool: Rapid Fire® Hunter's Star - Large Star  
Project Sizes: 42" x 56", 70" x 84" [with Borders: 54" x 68", 82" x 96"]

Create a fun quick quilt with a Jelly Roll™ or two, background fabric, and your Rapid Fire® Hunter's Star - Large Star tool.

## Fabric Requirements

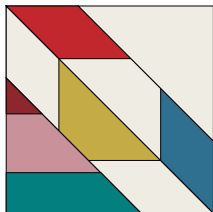
Based on 40" of usable fabric with few cutting errors.

| Fabric                | Lap                             | Twin                             |
|-----------------------|---------------------------------|----------------------------------|
| Mediums and Darks     | 28 – 2½" strips (1 Jelly Roll™) | 69 – 2½" strips (2 Jelly Rolls™) |
| Background            | 2 yards                         | 4½ yards                         |
| Optional Inner Border | [½ yard]                        | [⅝ yard]                         |
| Optional Outer Border | [⅞ yard]                        | [1¼ yards]                       |
| Binding               | ½ yard                          | ¾ yard                           |
| Backing               | 2¾ [or 3½] yards                | 5¼ [or 7½] yards                 |

It is recommended that you read through the instructions to familiarize yourself with the steps before you begin, and, of course, that you use your best skills when cutting, sewing, and pressing. Throughout the pattern, the numbers in parentheses indicate what you need to make for your desired quilt size (lap, twin). The numbers in brackets indicate yardage and inches required if you want to add the optional border.

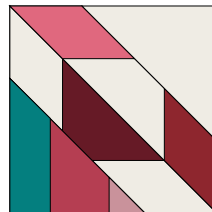
We'll start with a summary of the blocks you will need to create for this quilt.

## Block Summary



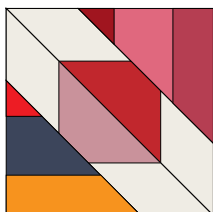
### Block A

7" finished (7½" unfinished)  
Make (16, 60)  
*Assorted Mediums/Darks & Background*



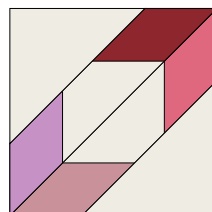
### Block B

7" finished (7½" unfinished)  
Make (24, 60)  
*Assorted Mediums/Darks & Background*



### Block C

7" finished (7½" unfinished)  
Make (4, 0)  
*Assorted Mediums/Darks & Background*



### Block D

7" finished (7½" unfinished)  
Make (4, 0)  
*Assorted Mediums/Darks & Background*

## Cutting Instructions

Note: wof stands for width of fabric and hwof stands for half width of fabric.

| Fabric        | Unit                                   | Lap                         | Twin                        |
|---------------|----------------------------------------|-----------------------------|-----------------------------|
| Mediums/Darks | Triangles, Trapezoids, and Star Points | See step 1 for information. | See step 1 for information. |



| Fabric                  | Unit        | Lap                                                                                                                                    | Twin                                                                                                                                     |
|-------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Background              | Triangles   | Cut 4 strips 6½" x wof; sub-cut into 24 squares 6½" x 6½". Cut once diagonally to yield 48 triangles.                                  | Cut 10 strips 6½" x wof; sub-cut into 60 squares 6½" x 6½". Cut once diagonally to yield 120 triangles.                                  |
|                         | Trapezoids  | Cut 6 strips 2¼" x wof; sub-cut into 48 trapezoids using the 7" trapezoid guide on your Rapid Fire® Hunter's Star – Large Star tool. * | Cut 14 strips 2¼" x wof; sub-cut into 120 trapezoids using the 7" trapezoid guide on your Rapid Fire® Hunter's Star – Large Star tool. * |
|                         | Star Points | Cut 10 strips 2½" x wof.                                                                                                               | Cut 24 strips 2½" x wof.                                                                                                                 |
| Optional Inner Border ‡ |             | Cut 6 strips 2½" x wof; piece and cut to make:<br>2 strips 2½" x 56½".<br>2 strips 2½" x 46½".                                         | Cut 8 strips 2½" x wof; piece and cut to make:<br>2 strips 2½" x 84½".<br>2 strips 2½" x 74½".                                           |
| Optional Outer Border ‡ |             | Cut 6 strips 4½" x wof; piece and cut to make:<br>2 strips 4½" x 60½".<br>2 strips 4½" x 54½".                                         | Cut 9 strips 4½" x wof; piece and cut to make:<br>2 strips 4½" x 88½".<br>2 strips 4½" x 82½".                                           |
| Binding                 |             | Cut 2¼" strips by preferred method and piece to make 211" [260"] of binding.                                                           | Cut 2¼" strips by preferred method and piece to make 323" [370"] of binding.                                                             |

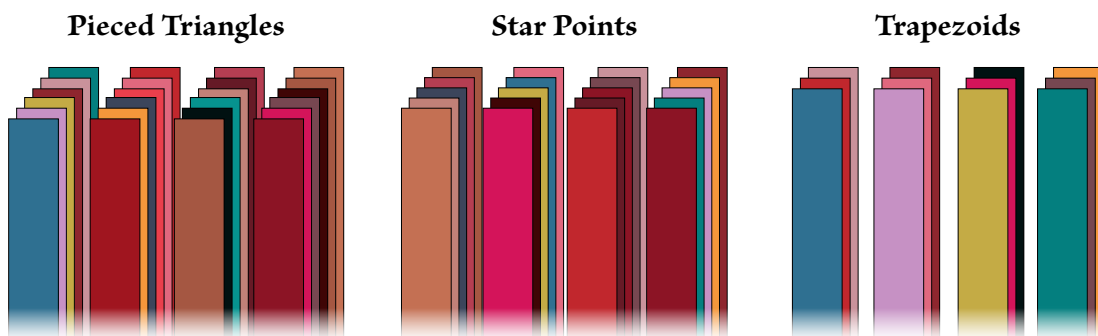
\* Refer to the instructions that came with your Rapid Fire® Hunter's Star - Large Star tool or watch the free tutorial video at [Studio180Design.net](http://Studio180Design.net) for additional information on cutting the trapezoids and for left handed pressing and cutting instructions.

‡ Refer to the note after step 21 before you cut your borders.

## Piecing Instructions

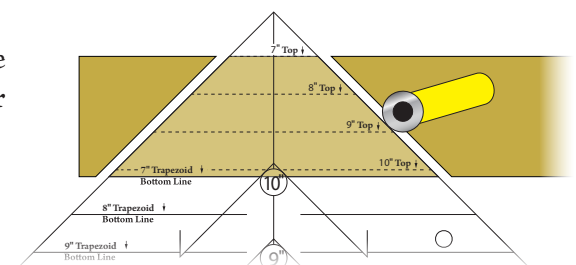
**Step 1 - Cut** the selected 2½" strips in half on the fold to get (56, 138) hwof strips.

**Step 2 - Lay out** the strips into three different piles: (24, 60) pieced triangle strips, (20, 48) star point strips, and (12, 30) trapezoid strips.



Steps 1 & 2 - Organize

**Step 3 - Cut** the (12, 30) trapezoid strips down to 2¼". Then sub-cut the strips into trapezoids using the 7" guideline on the Rapid Fire® Hunters Star – Large Star tool. You need (48, 120) trapezoids total.

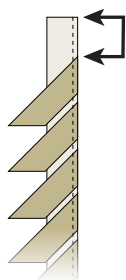


Step 3 - Cut

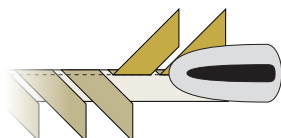
**Step 4 - Stitch** (48, 120) Medium/Dark trapezoids to the 2½" Background star point strips. Lay the Background strip right side up and position the first trapezoid about 2½" from the end of the strip. Feed the "pointy end" under the needle first, and use an accurate ¼" seam. Continue positioning the trapezoids on the strip, right sides down about ¼" apart. You will get 10-11 trapezoids on each strip.

**Step 5 - Press.** Lay the pieced strips on the ironing board, with the strip on the bottom and the trapezoids on top. Press the seams to lock the stitches. Carefully flip each trapezoid back and press the seam toward the trapezoid.

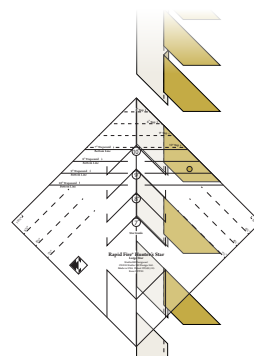
**Step 6 - Cut** the trapezoids apart. Position the strip right side up, vertically for righties and horizontally for lefties. Line up the edge of your **Rapid Fire® Hunter's Star** tool with the long edge of the trapezoid and the diagonal line with the edge of the strip. Make a 45° cut through the star point strip.



**Step 4 - Stitch**



**Step 5 - Press**



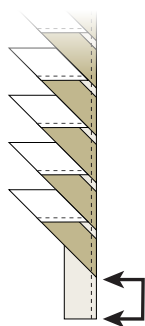
**Step 6 - Cut**

**Step 7 - Stitch** the opposite side of each of the (48, 120) trapezoids to the remaining Background strips. Position the first trapezoid at the top of the strip. Leave about ¼" between the trapezoids, and this time leave at least 2½" at the bottom of the strip after the last trapezoid.

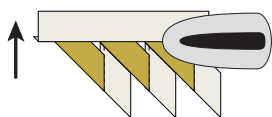
**Step 8 - Press.** Position your strip with the trapezoids on the bottom and the star point strip on top. Set your seams, then carefully flip up the strip and press your seams toward the star point strip.

**Step 9 - Cut** the trapezoids apart. Position the strip horizontally for righties and vertically for lefties. Align the diagonal on the tool with the edge of the strip and the edge of the tool with the long edge of the trapezoid. Make a 45° cut through the star point strip.

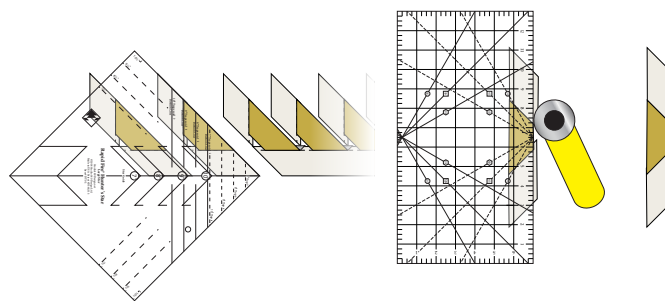
**Step 10 - Trim** the short side. Using a regular ruler, trim each trapezoid to 2¼" wide. You should have a total of (48, 120) Medium/Dark trapezoids.



**Step 7 - Stitch**



**Step 8 - Press**



**Steps 9 & 10 - Cut and Trim**

**Step 11 - Repeat** steps 4-10 using the (48, 120) Background trapezoids and the (20, 48) Medium/Dark strips. You can get 5 trapezoids on each half strip. For the lap size project, I sewed 5 trapezoids to 8 strips and 4 to 2 strips for each end. For the twin, put 5 trapezoids on each strip.



**Step 11 - Construct Trapezoids**

**Step 12 - Organize** the (24, 60) pieced triangle strips into groups of 3. You need to create (8, 20) strips sets.

**Step 13 - Stitch** the strips together to make your strip sets. Press the seams all in the same direction. The strip sets should measure 6½" wide.



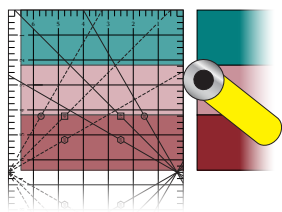
**Step 13 - Stitch and Press**

**Note:** Before you start sub-cutting your triangles, decide whether you are going to follow the layout in the pattern or create your own.

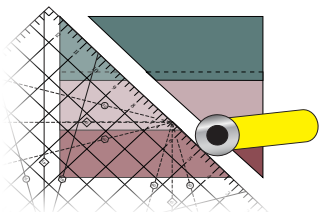
**Step 14 - Sub-cut** the strip sets into 6½" squares for a total of (24, 60) 6½" pieced squares.

**Step 15 - Cut.** Separate the squares into two piles, one with (20, 60) and the second with (4, 0). Layer the (20, 60) squares right sides together, nesting the seams, and cut on the diagonal to yield (40, 120) triangles. Separate the triangles into two piles with the strips oriented as shown and label them as A and B. Keep them separated, but feel free to work them all at the same time.

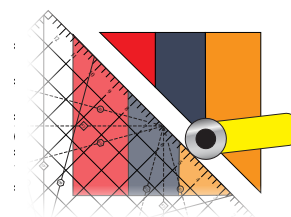
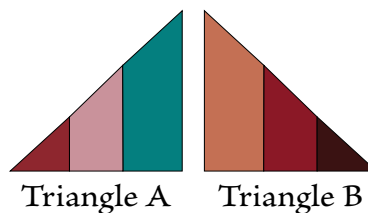
**Step 16 (For lap only) - Cut.** Lay the remaining 4 squares right side up on the cutting mat with the strips vertical and cut diagonally from the lower right to upper left corner, to yield 8 additional B triangles.



**Step 14 - Sub-cut**



**Step 15 - Cut and Label**

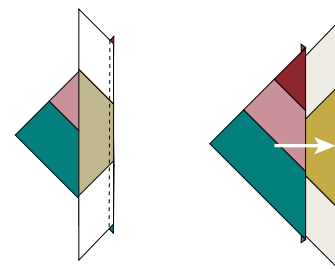


**Step 16 - Cut 8 B Triangles (Lap Only)**

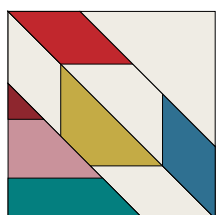
**Step 17 - Stitch** an oversized pieced triangle (either A or B) to the short edge of each of the Medium/Dark trapezoid units. Note that the seams will not match; just center the triangle. Press the seams open. Repeat using all A and B triangles to create (48, 120) pieced triangles. These are the dark half blocks.

**Step 18 - Stitch** an oversized Background triangle to the short edge of each of the Background trapezoid units. Press the seams open. Repeat to create (48, 120) pieced triangles. These are the light half blocks.

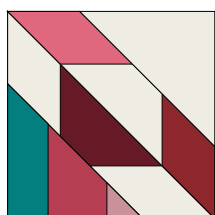
**Step 19 - Stitch** the light and dark half blocks together along the long edge to make the number of blocks shown below. Press the seams open.



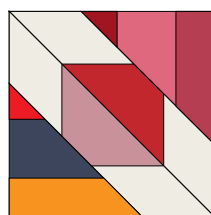
**Step 17 - Stitch and Press**



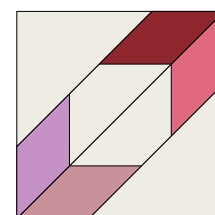
**Block A**  
Make (16, 60)



**Block B**  
Make (24, 60)

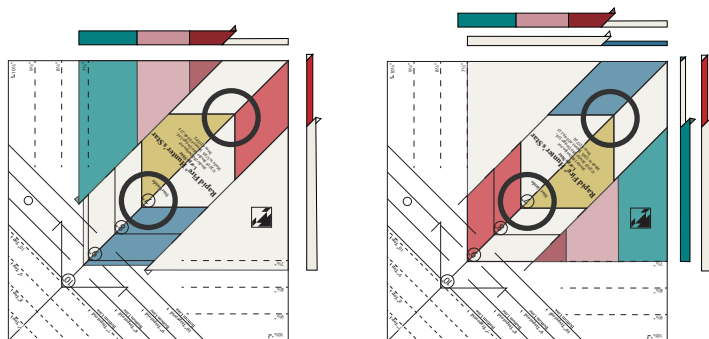


**Block C**  
Make (4, 0)



**Block D**  
Make (4, 0)

**Step 20 - Trim** each block to exactly  $7\frac{1}{2}$ " x  $7\frac{1}{2}$ ", using the **Rapid Fire® Hunter's Star - Large Star** tool. Align the *Star Point* lines and the 7" **Star Guides** with the points on your block. Trim the two edges. Rotate the block 180°, align the same lines and the  $7\frac{1}{2}$ " cleanup lines. Trim again.



**Step 20 - Trim, Rotate, and Trim Again**

**Step 21 - Lay out** the blocks as shown on page (7, 8). Stitch the blocks together into rows, and the rows into the quilt center. Press all seams open or in opposite directions on each row to make the seams nest. The choice is yours.

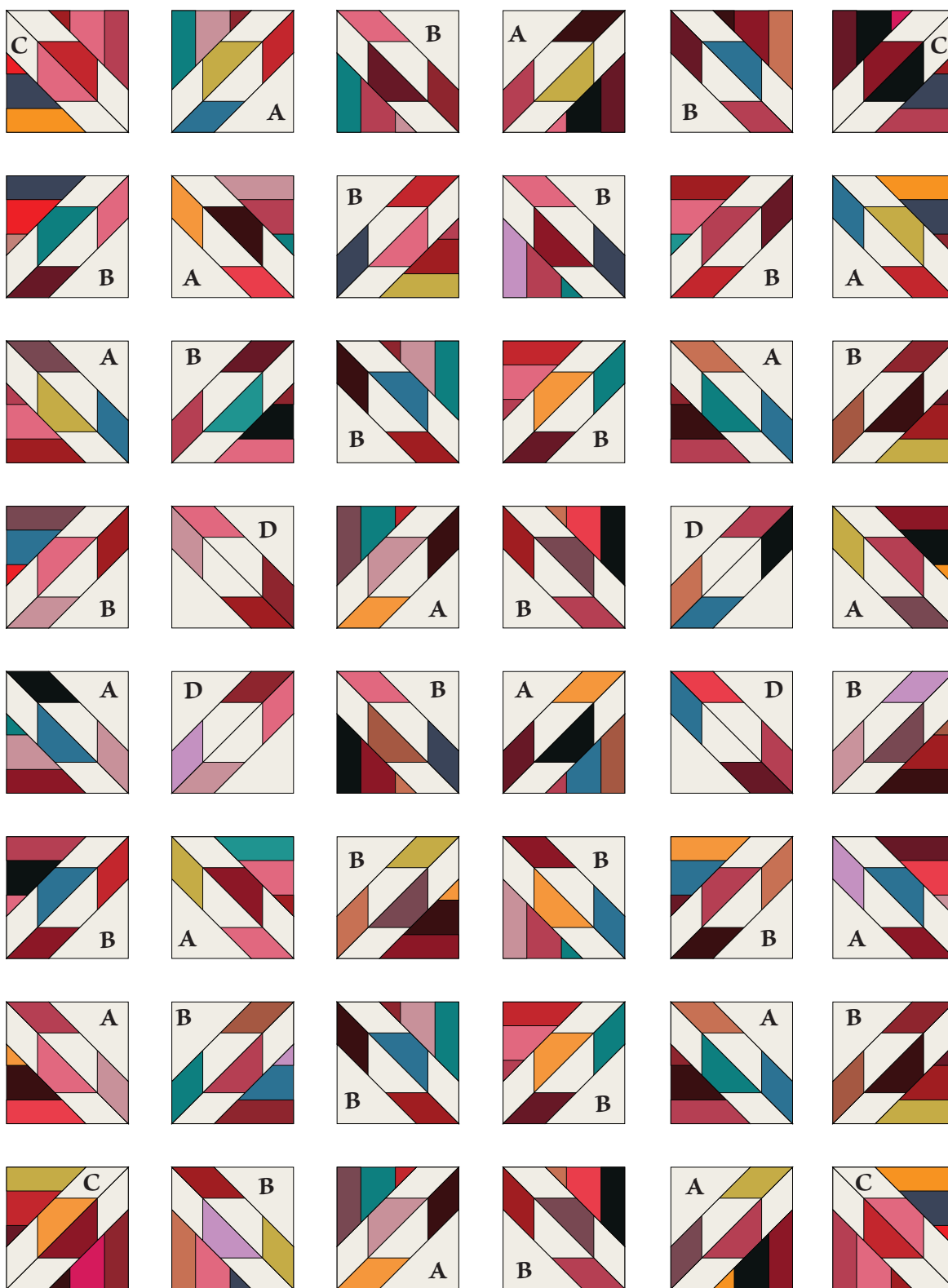
### Optional Borders

**Note:** Check your border length before proceeding. To determine your specific border length, measure the quilt top to bottom in three different places. If those measurements are different, add the three measurements together and divide by three. That will be the length that you will need to cut your first two borders. Once the first two borders are attached to the quilt, repeat the process for the remaining sides.

**Step 22 - Attach** the inner border strips to the quilt center as shown on page 9. Stitch the inner border  $2\frac{1}{2}$ " strips to the quilt, long strips first followed by the short strips. Press toward the inner border.

**Step 23 - Attach** the outer border. Stitch the outer border  $4\frac{1}{2}$ " strips to the quilt, long strips first followed by the short strips. Press toward the outer border.

**Step 24 - Finish with batting, backing, quilting, and binding!** Layer quilt top with batting and backing. Baste and quilt. Bind and enjoy your beautiful quilt!

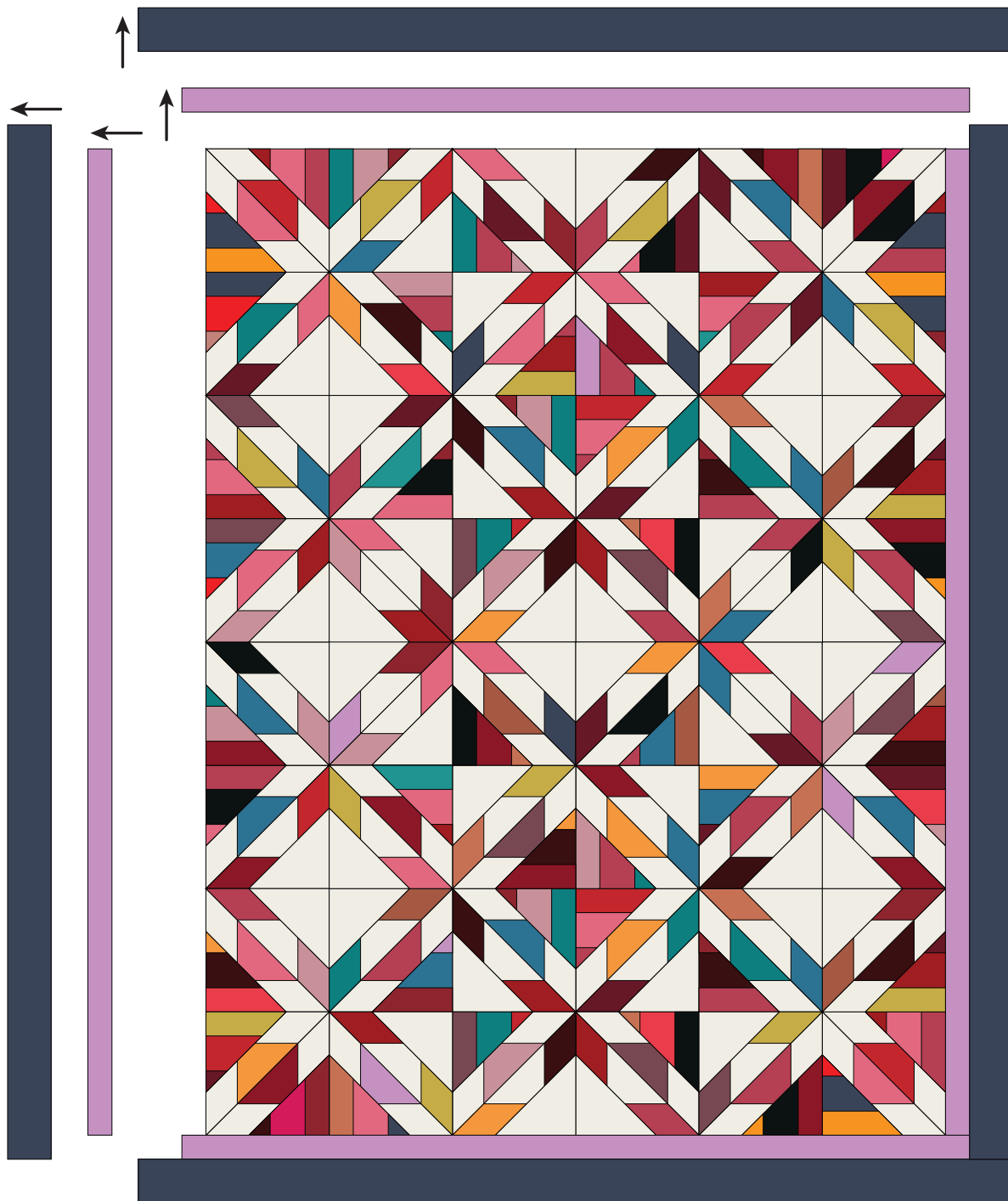


Lap Layout



**Twin Layout**





### Optional Border Construction

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We hope you have enjoyed making your own version of *Short Circuit*, and we hope you consider sharing a photo of your project on Instagram ([#ShortCircuitPattern180](https://www.instagram.com/ShortCircuitPattern180/))!

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[Studio180Design.net](http://Studio180Design.net)