

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION

**Part Number:** [0901210763](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch C-Grid III™ Header, Single Row, Right Angle, 3 Circuits, 0.38μm (15μ") Gold (Au) Selective Plating

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

Product Family PCB Headers  
Series [90121](#)  
Application Wire-to-Board  
Product Name C-Grid III™

**Physical**

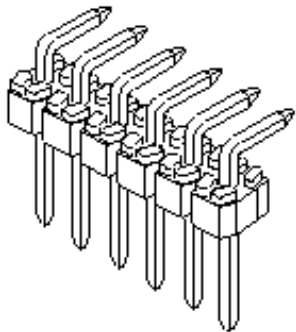
Breakaway Yes  
Circuits (Loaded) 3  
Circuits (maximum) 3  
Color - Resin Black  
First Mate / Last Break No  
Glow-Wire Compliant No  
Guide to Mating Part No  
Keying to Mating Part None  
Lock to Mating Part None  
Material - Metal Brass  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin Polyester  
Number of Rows 1  
Orientation Right Angle  
PC Tail Length (in) 0.114 In  
PC Tail Length (mm) 2.90 mm  
PCB Locator No  
PCB Retention None  
Packaging Type Bag  
Pitch - Mating Interface (in) 0.100 In  
Pitch - Mating Interface (mm) 2.54 mm  
Plating min: Mating (μin) 15  
Plating min: Mating (μm) 0.38  
Plating min: Termination (μin) 120  
Plating min: Termination (μm) 3  
Polarized to Mating Part No  
Polarized to PCB No  
Shrouded No  
Stackable No  
Temperature Range - Operating -55°C to +125°C  
Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 3A  
Voltage - Maximum 350V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5  
Lead-free Process Capability Wave Capable (TH only)



Series  
image - Reference only

**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**

**China RoHS**



**Need more information on product  
environmental compliance?**  
  
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of  
Compliance, [click here](#)

Please visit the [Contact Us](#) section for any  
non-product compliance questions.

**Search Parts in this Series**  
[90121Series](#)

|                                         |     |
|-----------------------------------------|-----|
| Max. Cycles at Max. Process Temperature | 1   |
| Process Temperature max. C              | 260 |

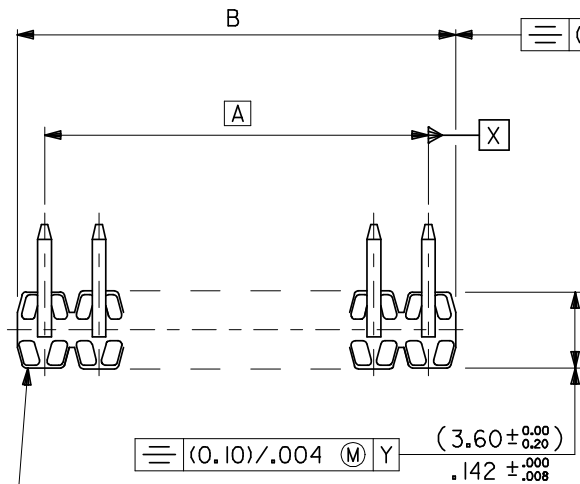
**Material Info**

**Reference - Drawing Numbers**

|               |           |
|---------------|-----------|
| Sales Drawing | SDA-90121 |
|---------------|-----------|

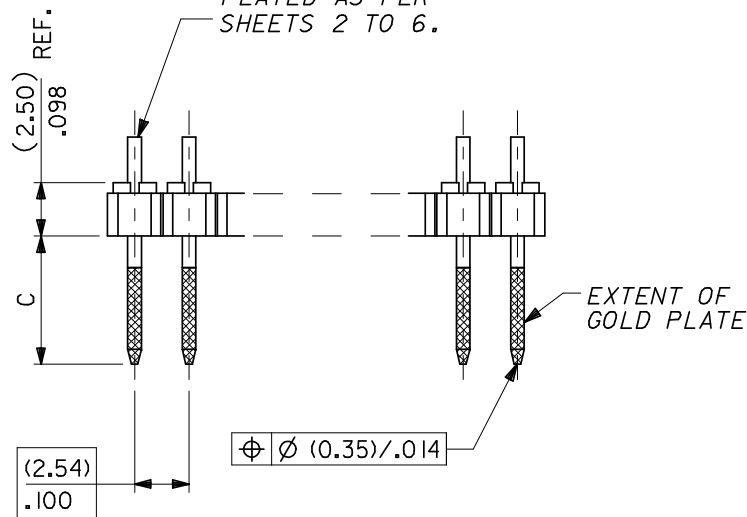
This document was generated on 03/30/2010

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WAFER: 15% GLASS FILLED POLYESTER  
TO UL 94V-0.  
COLOUR : BLACK.

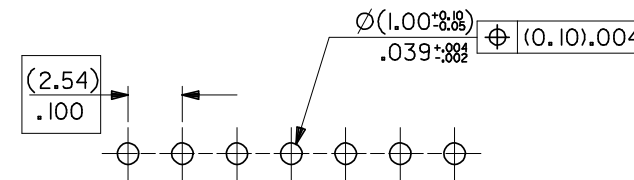
PINS: (0.635)/.025 SQ.  
BRASS WIRE.  
PLATED AS PER  
SHEETS 2 TO 6.



| CKT<br>SIZE | DIM." A" |       | DIM." B" ( $\pm 0.20$ )<br>$\pm .008$ |       | CKT<br>SIZE | DIM." A" |       | DIM." B" ( $\pm 0.20$ )<br>$\pm .008$ |       |
|-------------|----------|-------|---------------------------------------|-------|-------------|----------|-------|---------------------------------------|-------|
| 1X 1        |          |       | (2.54)                                | .100  | 1X21        | (50.80)  | 2.000 | (53.34)                               | 2.100 |
| 1X 2        | (2.54)   | .100  | (5.08)                                | .200  | 1X22        | (53.34)  | 2.100 | (55.88)                               | 2.200 |
| 1X 3        | (5.08)   | .200  | (7.62)                                | .300  | 1X23        | (55.88)  | 2.200 | (58.42)                               | 2.300 |
| 1X 4        | (7.62)   | .300  | (10.16)                               | .400  | 1X24        | (58.42)  | 2.300 | (60.96)                               | 2.400 |
| 1X 5        | (10.16)  | .400  | (12.70)                               | .500  | 1X25        | (60.96)  | 2.400 | (63.50)                               | 2.500 |
| 1X 6        | (12.70)  | .500  | (15.24)                               | .600  | 1X26        | (63.50)  | 2.500 | (66.04)                               | 2.600 |
| 1X 7        | (15.24)  | .600  | (17.78)                               | .700  | 1X27        | (66.04)  | 2.600 | (68.58)                               | 2.700 |
| 1X 8        | (17.78)  | .700  | (20.32)                               | .800  | 1X28        | (68.58)  | 2.700 | (71.12)                               | 2.800 |
| 1X 9        | (20.32)  | .800  | (22.86)                               | .900  | 1X29        | (71.12)  | 2.800 | (73.66)                               | 2.900 |
| 1X10        | (22.86)  | .900  | (25.40)                               | 1.000 | 1X30        | (73.66)  | 2.900 | (76.20)                               | 3.000 |
| 1X11        | (25.40)  | 1.000 | (27.94)                               | 1.100 | 1X31        | (76.20)  | 3.000 | (78.74)                               | 3.100 |
| 1X12        | (27.94)  | 1.100 | (30.48)                               | 1.200 | 1X32        | (78.74)  | 3.100 | (81.28)                               | 3.200 |
| 1X13        | (30.48)  | 1.200 | (33.02)                               | 1.300 | 1X33        | (81.28)  | 3.200 | (83.82)                               | 3.300 |
| 1X14        | (33.02)  | 1.300 | (35.56)                               | 1.400 | 1X34        | (83.82)  | 3.300 | (86.36)                               | 3.400 |
| 1X15        | (35.56)  | 1.400 | (38.10)                               | 1.500 | 1X35        | (86.36)  | 3.400 | (88.90)                               | 3.500 |
| 1X16        | (38.10)  | 1.500 | (40.64)                               | 1.600 | 1X36        | (88.90)  | 3.500 | (91.44)                               | 3.600 |
| 1X17        | (40.64)  | 1.600 | (43.18)                               | 1.700 | 1X37        | (91.44)  | 3.600 | (93.98)                               | 3.700 |
| 1X18        | (43.18)  | 1.700 | (45.72)                               | 1.800 | 1X38        | (93.98)  | 3.700 | (96.52)                               | 3.800 |
| 1X19        | (45.72)  | 1.800 | (48.26)                               | 1.900 | 1X39        | (96.52)  | 3.800 | (99.06)                               | 3.900 |
| 1X20        | (48.26)  | 1.900 | (50.80)                               | 2.000 | 1X40        | (99.06)  | 3.900 | (101.60)                              | 4.000 |

#### NOTES

1. FOR ASSY NUMBERS WITH FINISH OPTIONS AND DIM'S C & D SEE SHEETS 2 TO 6.
2. PRODUCT SPEC: PS-99020-0001
3. RECOMMENDED PCB THICKNESS 1.6mm



#### RECOMMENDED P.C. BOARD HOLE PATTERN

|                                                                                                                        |     |             |                                                            |                                       |                                       |                                                                                                                                  |             |                            |       |              |                                                |                           |  |  |
|------------------------------------------------------------------------------------------------------------------------|-----|-------------|------------------------------------------------------------|---------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|-------|--------------|------------------------------------------------|---------------------------|--|--|
| Corrected view size<br>EC NO: E2008-0479<br>DRWN: LK/ERNAN 2008/03/12<br>CHKD: 2008/03/18<br>APPR: BMAGUIRE 2008/03/18 |     |             |                                                            | QUALITY SYMBOLS<br><br>▽=0<br><br>C=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |                                                                                                                                  |             | DIMENSION STYLE<br>MM ONLY |       | SCALE<br>4:1 | DESIGN UNITS<br>METRIC                         | THIRD ANGLE<br>PROJECTION |  |  |
| K                                                                                                                      | REV | DESCRIPTION |                                                            |                                       | mm                                    | INCH                                                                                                                             | DRAWN BY    |                            | DATE  |              | C-GRID III<br>SINGLE ROW RIGHT<br>ANGLE HEADER |                           |  |  |
|                                                                                                                        |     |             | 4 PLACES                                                   |                                       | ± ---                                 | ± ---                                                                                                                            | DB          |                            | TITLE |              |                                                |                           |  |  |
|                                                                                                                        |     |             | 3 PLACES                                                   |                                       | ± ---                                 | ± ---                                                                                                                            | CHECKED BY  |                            | DATE  |              |                                                |                           |  |  |
|                                                                                                                        |     |             | 2 PLACES                                                   |                                       | ± ---                                 | ± ---                                                                                                                            | APPROVED BY |                            | DATE  |              |                                                |                           |  |  |
|                                                                                                                        |     |             | 1 PLACE                                                    |                                       | ± ---                                 | ± ---                                                                                                                            |             |                            |       |              |                                                |                           |  |  |
|                                                                                                                        |     |             | ANGULAR ±1/2°                                              |                                       |                                       | MATERIAL NO.                                                                                                                     |             | DOCUMENT NO.               |       | SHEET NO.    |                                                |                           |  |  |
|                                                                                                                        |     |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                       |                                       | SEE CHART                                                                                                                        |             | SDA-90121                  |       | 1 OF 6       |                                                |                           |  |  |
|                                                                                                                        |     |             |                                                            |                                       |                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |             |                            |       |              |                                                |                           |  |  |

|           |                                                                   |                   |                                            |            |              |                               |           |                                                                                                        |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|-----------|-------------------------------------------------------------------|-------------------|--------------------------------------------|------------|--------------|-------------------------------|-----------|--------------------------------------------------------------------------------------------------------|-------------------------------|------------------|---------------------------------------------------------|---|-----|------|---------------------|------------------------------------------------------------------------------------------------------------------------|------|
|           |                                                                   | 10                | 9                                          | 8          | 7            | 6                             | 5         | 4                                                                                                      | 3                             | 2                | 1                                                       |   |     |      |                     |                                                                                                                        |      |
| F         | PART NO.<br>SEE CHART<br>DWG. NO.<br>SDA-90121                    | CIRCUIT<br>SIZE   | PLATING<br>TYPE A<br>PART NO.              |            |              | PLATING<br>TYPE E<br>PART NO. |           |                                                                                                        | PLATING<br>TYPE F<br>PART NO. |                  |                                                         | F |     |      |                     |                                                                                                                        |      |
|           |                                                                   |                   | 90121-0121                                 | 90121-0761 | 90121-0921   |                               |           |                                                                                                        |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| E         | DIM<br>C<br>(±0.20)<br>(±.008)<br>(6.75)<br>.266                  | 1 X 1             | ↑                                          | -0122      | ↑            | -0762                         | ↑         | -0922                                                                                                  |                               |                  |                                                         | E |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 2             |                                            | -0123      |              | -0763                         |           | -0923                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 3             |                                            | -0124      |              | -0764                         |           | -0924                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 4             |                                            | -0125      |              | -0765                         |           | -0925                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 5             |                                            | -0126      |              | -0766                         |           | -0926                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 6             |                                            | -0127      |              | -0767                         |           | -0927                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 7             |                                            | -0128      |              | -0768                         |           | -0928                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 8             |                                            | -0129      |              | -0769                         |           | -0929                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 9             |                                            | -0130      |              | -0770                         |           | -0930                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 10            |                                            | -0131      |              | -0771                         |           | -0931                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| D         | DIM<br>D<br>(±0.25)<br>(±.010)<br>(2.90)<br>.114                  | 1 X 11            |                                            | -0132      |              | -0772                         |           | -0932                                                                                                  |                               |                  |                                                         | D |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 12            |                                            | -0133      |              | -0773                         |           | -0933                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 13            |                                            | -0134      |              | -0774                         |           | -0934                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 14            |                                            | -0135      |              | -0775                         |           | -0935                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 15            |                                            | -0136      |              | -0776                         |           | -0936                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 16            |                                            | -0137      |              | -0777                         |           | -0937                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 17            |                                            | -0138      |              | -0778                         |           | -0938                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 18            |                                            | -0139      |              | -0779                         |           | -0939                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 19            |                                            | -0140      |              | -0780                         |           | -0940                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 20            |                                            | -0141      |              | -0781                         |           | -0941                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| C         |                                                                   | 1 X 21            |                                            | -0142      |              | -0782                         |           | -0942                                                                                                  |                               |                  |                                                         | C |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 22            |                                            | -0143      |              | -0783                         |           | -0943                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 23            |                                            | -0144      |              | -0784                         |           | -0944                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 24            |                                            | -0145      |              | -0785                         |           | -0945                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 25            |                                            | -0146      |              | -0786                         |           | -0946                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 26            |                                            | -0147      |              | -0787                         |           | -0947                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 27            |                                            | -0148      |              | -0788                         |           | -0948                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 28            |                                            | -0149      |              | -0789                         |           | -0949                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 29            |                                            | -0150      |              | -0790                         |           | -0950                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 30            |                                            | -0151      |              | -0791                         |           | -0951                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| B         |                                                                   | 1 X 31            |                                            | -0152      |              | -0792                         |           | -0952                                                                                                  |                               |                  |                                                         | B |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 32            |                                            | -0153      |              | -0793                         |           | -0953                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 33            |                                            | -0154      |              | -0794                         |           | -0954                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 34            |                                            | -0155      |              | -0795                         |           | -0955                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 35            |                                            | -0156      |              | -0796                         |           | -0956                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 36            |                                            | -0157      |              | -0797                         |           | -0957                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 37            |                                            | -0158      |              | -0798                         |           | -0958                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 38            |                                            | -0159      |              | -0799                         |           | -0959                                                                                                  |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 39            |                                            |            |              |                               |           |                                                                                                        |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   | 1 X 40            | ↓                                          | 90121-0160 | ↓            | 90121-0800                    | ↓         | 90121-0960                                                                                             |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| A         | NOTES:<br>FOR PLATING VARIATIONS SEE<br>ENG.STD. SDES-99000-0003. | STANDARD PRODUCTS | FOR PREVIOUS<br>DRAWING ISSUES<br>SEE MRI. | H          | SEE SHEET I. | LTR                           | REVISIONS | DIMENSIONS SHOWN ( METRIC ) INCH                                                                       |                               | DRWG<br>BY<br>DB | REVISE ONLY ON CAD SYSTEM                               |   | SHL | REV. | A                   |                                                                                                                        |      |
|           |                                                                   |                   |                                            |            |              |                               |           | UNLESS OTHERWISE SPECIFIED<br>TOLERANCES: ANGULAR ± 1°                                                 |                               |                  | CAD/CAM FILENAME<br>SA90121X2<br>DGN                    |   |     |      |                     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO<br>MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |      |
|           |                                                                   |                   |                                            |            |              |                               |           | INCH ( METRIC )                                                                                        |                               | CHK'D<br>BY      | TITLE<br>C-GRID III<br>SINGLE ROW RIGHT<br>ANGLE HEADER |   |     |      | SHEET NO. DATE      |                                                                                                                        | SIZE |
|           |                                                                   |                   |                                            |            |              |                               |           | 3 PLACE ± . ---                                                                                        |                               |                  |                                                         |   |     |      | 20F 16/ 7/87        |                                                                                                                        |      |
|           |                                                                   |                   |                                            |            |              |                               |           | 2 PLACE ± . --- ± ---                                                                                  |                               | APP'D<br>BY      | MOLEX MOLEX EUROPE                                      |   |     |      | PART NO. DWG NO.    |                                                                                                                        | B    |
|           |                                                                   |                   |                                            |            |              |                               |           | 1 PLACE ± --- ± ---                                                                                    |                               |                  |                                                         |   |     |      | SEE CHART SDA-90121 |                                                                                                                        |      |
|           |                                                                   |                   |                                            |            |              |                               |           | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS                                                |                               | SCALE            |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   |                   |                                            |            |              |                               |           | DESIGN DIMENSION (PRIMARY) <input checked="" type="checkbox"/> (MM) <input type="checkbox"/> IN.       |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
|           |                                                                   |                   |                                            |            |              |                               |           | EQUIVALENT DIMENSION (SECONDARY) <input type="checkbox"/> (MM) <input checked="" type="checkbox"/> IN. |                               |                  |                                                         |   |     |      |                     |                                                                                                                        |      |
| 7132-1283 |                                                                   | 10                | 9                                          | 8          | 7            | 6                             | 5         | 4                                                                                                      | 3                             | 2                | 1                                                       |   |     |      |                     |                                                                                                                        |      |