# Calculator project

## Features

“Basic” mode

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MODE 0 | MODE 1 | MODE 2  (after root, log) | MODE 3  (after store/recall) |
| 1 | 1 | Sin | 1 | NULL |
| 2 | 2 | aSin | 2 | NULL |
| 3 | 3 | Fact | 3 | NULL |
| 4 | 4 | Cos | 4 | NULL |
| 5 | 5 | aCos | 5 | NULL |
| 6 | 6 | Recall | 6 | NULL |
| 7 | 7 | Tan | 7 | NULL |
| 8 | 8 | aTan | 8 | NULL |
| 9 | 9 | Store | 9 | NULL |
| 0 | 0 | ) | 0 | NULL |
| \* | . | ( | . | NULL |
| # | DEL | Pi | DEL | NULL |
| A | + | Root | NULL | A |
| B | - | Log | - | B |
| C | \* | Pow | NULL | C |
| D | / | e | NULL | D |
| SW1 | EQ | ANS | ( [E] | ANS |
| SW2 | MODE | MODE | NULL | NULL |

|  |  |
| --- | --- |
| 0 | 0011.0000 |
| 1 | 0011.0001 |
| 2 | 0011.0010 |
| 3 | 0011.0011 |
| 4 | 0011.0100 |
| 5 | 0011.0101 |
| 6 | 0011.0110 |
| 7 | 0011.0111 |
| 8 | 0011.1000 |
| 9 | 0011.1001 |
| . | 0010.1110 |
| + | 0010.1011 |
| - | 0010.1101 |
| \* | 0010.1010 |
| x | 0111.1000 |
| / | 0010.1111 |
| ÷ | 1111.1101 |
| ( | 0010.1000 |
| ) | 0010.1001 |
| Pi | 1111.0111 |
| Root | 1110.1000 |
| e | 0110.0101 |
| ! | 0010.0001 |
| Pow | 0101.1110 |
| A | 0100.0001 |
| B | 0100.0010 |
| C | 0100.0011 |
| D | 0100.0100 |
| ^-1 | 1110.1001 |

Lookup

|  |  |
| --- | --- |
| s | Sin |
| d | aSin |
| c | Cos |
| v | aCos |
| R | Recall\* |
| t | Tan |
| y | aTan |
| S | Store\* |
| P | Pi\* |
| r | Root |
| l | Log |
| E | e\* |
| > | Mode 1\* |
| < | Mode 0\* |
| e | ( [Special closing bracket]\* |
| A | A\* |
| B | B\* |
| C | C\* |
| D | D\* |
| a | ANS\* |
| ! | factorial |
| ^ | pow |
| + |  |
| - |  |
| / |  |
| \* |  |
| n | Negate |
| \_ | NAN |