Laboratory WORK Initial data №4

« Simple digital circuits design and simulation »

**Principles of Circuits**

# Transistor type

Table 1 – Transistor Type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | Transistor type | № | Transistor type | № | Transistor type |
|  |  |  |  |  |  |
| 1 | 2N3904 | 24 | BC817-25 | 47 | 2SCR574D |
| 2 | FZT849 | 25 | BC817-40 | 48 | 2SD1898 |
| 3 | ZTX1048A | 26 | BC337-25 | 49 | 2SD2656 |
| 4 | 2N4124 | 27 | BC337-40 | 50 | BC848B |
| 5 | 2N3391A | 28 | BC546B | 51 | BCX19 |
| 6 | 2N5089 | 29 | BC846B | 52 | BC817-16 |
| 7 | 2N5210 | 30 | 2SC4081 | 53 | SSTA06 |
| 8 | 2N2219A | 31 | 2SC4617 | 54 | SST3904 |
| 9 | 2N4401 | 32 | 2SC5876 | 55 | SST4401 |
| 10 | 2N5550 | 33 | 2SCR293P | 56 | SST2222A |
| 11 | 2N2369 | 34 | 2SCR372P | 57 | BC847BT116 |
| 12 | 2N5769 | 35 | 2SCR375P | 58 | BC817-25T116 |
| 13 | 2N3055 | 36 | 2SCR512P | 59 | BC817-40T116 |
| 14 | BCW60A | 37 | 2SCR513P | 60 | 2SC5658 |
| 15 | BCW60B | 38 | 2SCR514P | 61 | 2SC4617EB |
| 16 | BCW60C | 39 | 2SCR533P | 62 | 2SCR502EB |
| 17 | BCW60D | 40 | 2SCR542P | 63 | 2SC4081UB |
| 18 | 2N3019 | 41 | 2SCR544P | 64 | 2SCR502UB |
| 19 | BC547B | 42 | 2SCR552P | 65 | 2SC2412K |
| 20 | BC547C | 43 | 2SCR553P | 66 | 2SC2411K |
| 21 | BC847A | 44 | 2SCR554P | 67 | 2SD1781K |
| 22 | BC847B | 45 | 2SCR573D | 68 | 2SD1484K |
| 23 | BC847C | 46 | 2SCR573D | 69 | 2SD1782K |

# Combinational Logic Circuits variants

Table 2 - Combinational Logic Circuits

|  |  |  |  |
| --- | --- | --- | --- |
| № | Circuit | № | Circuit |
| 1 |  | 11 |  |
| 2 |  | 12 |  |
| 3 |  | 13 |  |
| 4 |  | 14 |  |
| 5 |  | 15 |  |
| 6 |  | 16 |  |
| 7 |  | 17 |  |
| 8 |  | 18 |  |
| 9 |  | 19 |  |
| 10 |  | 20 |  |

# Logic families

Table 3 – Circuit variants for study of logic families

|  |  |  |  |
| --- | --- | --- | --- |
| № | Circuit | № | Circuit |
| 1 |  | 11 |  |
| 2 |  | 12 |  |
| 3 |  | 13 |  |
| 4 |  | 14 |  |
| 5 |  | 15 |  |
| 6 |  | 16 |  |
| 7 |  | 17 |  |
| 8 |  | 18 |  |
| 9 |  | 19 |  |
| 10 |  | 20 |  |