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|  | A1 | Модуль питания IRM-30-48 | 1 | MEAN WELL |
|  | A2 | Модуль питания SCW12C-12 | 1 | MEAN WELL |
|  | A3 | Модуль питания SCW08C-05 | 1 | MEAN WELL |
|  | A4 | Модуль питания DCW08C-12 | 1 | MEAN WELL |
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|  |  | Конденсаторы |  |  |
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|  | C1-C6 | 0805-0,1 мкФ±10%-50В-X7R | 6 | YAGEO  CC0805KPX7R9BB104 |
|  | C7-C9 | 22 мкФ±10%-16В, тип B | 3 | AVX  TAJB226K016RNJ |
|  | C10, C11 | 0805-0,1 мкФ±10%-50В-X7R | 2 | YAGEO  CC0805KPX7R9BB104 |
|  | C12 | 22 мкФ±10%-16В, тип B | 1 | AVX  TAJB226K016RNJ |
|  | C13 | 0805-0,1 мкФ±10%-50В-X7R | 1 | YAGEO  CC0805KPX7R9BB104 |
|  | C14, C15 | 0805-0,047 мкФ±10%-50В-X7R | 2 | YAGEO  CC0805KRX7R9BB473 |
|  | C16 | 22 мкФ±20%-100В, 8x12, RM5,0 | 1 | EPCOS  B41828A9226M006 |
|  | C17 | 1210-0,1 мкФ±10%-100В-X7R | 1 | YAGEO  CC1210KFX7R0BB104 |
|  | C18-C25 | 0805-0,1 мкФ±10%-50В-X7R | 8 | YAGEO  CC0805KPX7R9BB104 |
|  | C26, C27 | 0805-100 пФ±10%-50В-NP0 | 2 | YAGEO  CC0805JRNPO9BN101 |
|  | C28, С29 | 0805-0,1 мкФ±10%-50В-X7R | 2 | YAGEO  CC0805KPX7R9BB104 |
|  | С30-С32 | 1206-0,01 мкФ±1%-25В-C0G | 3 | KEMET  C1206C103F3GECAUTO |
|  | C33 | 1206-0,1 мкФ±5%-50В-C0G | 1 | MURATA  GRM31C5C1H104JA01L |
|  | C34-C44 | 0805-0,1 мкФ±10%-50В-X7R | 11 | YAGEO  CC0805KPX7R9BB104 |
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|  | C45 | 10 мкФ±10%-16В, тип A | 1 | AVX  TAJA106K016RNJ |
|  | C46, C47 | 0805-6,2 пФ±5%-50В-NP0 | 2 | YAGEO  C0805C629C5GACTU |
|  | C48-C59 | 0805-0,1 мкФ±10%-50В-X7R | 12 | YAGEO  CC0805KPX7R9BB104 |
|  | C60-C64 | 1812-0,022 мкФ±5%-630В-U2J | 5 | MURATA  GRM43D7U2J223JW31L |
|  | C65 | 22 мкФ±20%-100В, 8x12, RM5,0 | 1 | EPCOS  B41828A9226M006 |
|  | C66 | 100 мкФ±20%-100В, 10x20, RM5,0 | 1 | EPCOS  B41851A9107M000 |
|  | C67-C76 | 1210-0,1 мкФ±10%-100В-X7R | 10 | YAGEO  CC1210KFX7R0BB104 |
|  | C77-C82 | 0805-0,1 мкФ±10%-50В-X7R | 6 | YAGEO  CC0805KPX7R9BB104 |
|  | C83, C84 | 22 мкФ±10%-16В, тип B | 2 | AVX  TAJB226K016RNJ |
|  | C85, C86 | 47 мкФ±20%-16В, 6,3x5,4 | 2 | SAMWHA  RС1C476M6L005VR |
|  | C87 | 47 мкФ±20%-100В, 10x16, RM5,0 | 1 | JAMICON  TKR470M2AG13M |
|  | C88-C91 | 0805-0,1 мкФ±10%-50В-X7R | 4 | YAGEO  CC0805KPX7R9BB104 |
|  | C92 | 10 мкФ±10%-6,3В, тип A | 1 | AVX  TAJA106K006RNJ |
|  | C93 | 0805-0,1 мкФ±10%-50В-X7R | 1 | YAGEO  CC0805KPX7R9BB104 |
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|  |  | Микросхемы |  |  |
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|  | D1-D3 | TL074IDR | 3 | Texas  Instruments |
|  | D4 | LM2903D | 1 | Texas  Instruments |
|  | D5 | TL431ACPK | 1 | Texas  Instruments |
|  | D6 | LM2903D | 1 | Texas  Instruments |
|  | D7 | TL072IDR | 1 | Texas  Instruments |
|  | D8 | ADG413BRZ | 1 | Analog Devices |
|  | D9, D10 | TL072IDR | 2 | Texas  Instruments |
|  | D11 | STM32F103RCT6 | 1 | Прошивка  РОФ.ГРЛМ.02008-01 99 01 |
|  | D12 | SA5532D | 1 | Texas  Instruments |
|  | D13 | TL072IDR | 1 | Texas  Instruments |
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|  | D14-D17 | SN74HC14D | 4 | Texas  Instruments |
|  | D18-D20 | ULN2003ADR | 3 | Texas  Instruments |
|  | D21 | CAT5132ZI-10-GT3 | 1 | ON  Semiconductor |
|  | D22 | LM1117IDTX-3.3/NOPB | 1 | Texas  Instruments |
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|  | H1 | Светодиод WP934SB/4SRD | 1 | Kingbright |
|  | H2-H4 | Светодиод WP934SB/4GD | 3 | Kingbright |
|  | H5 | Светодиод WP1384AD/ID | 1 | Kingbright |
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|  | K1 | Реле RT424060 | 1 | TE Connectivity |
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|  |  | Резисторы |  |  |
|  |  |  |  |  |
|  | R1, R2 | 0805-10 кОм±5% | 2 | YAGEO  RC0805JR-0710KL |
|  | R3, R4 | 0805-1 кОм±5% | 2 | YAGEO  RC0805JR-071KL |
|  | R5, R6 | 0805-10 кОм±5% | 2 | YAGEO  RC0805JR-0710KL |
|  | R7 | 1206-100 Ом±1% | 1 | YAGEO  RC1206FR-07100RL |
|  | R8 | 0805-1 кОм±5% | 1 | YAGEO  RC0805JR-071KL |
|  | R9 | 0805-8,2 кОм±5% | 1 | YAGEO  RC0805JR-078K2L |
|  | R10, R11 | 0805-56 кОм±5% | 2 | YAGEO  RC0805JR-0756KL |
|  | R12-R31 | 0805-10 кОм±5% | 20 | YAGEO  RC0805JR-0710KL |
|  | R32 | 0805-5,1 кОм±5% | 1 | YAGEO  RC0805JR-075K1L |
|  | R33 | 0805-15 кОм±5% | 2 | YAGEO  RC0805JR-0715KL |
|  | R34-R37 | 0805-1 кОм±5% | 4 | YAGEO  RC0805JR-071KL |
|  | R38 | Резистор подстроечный 10 кОм±10% | 1 | Bourns  3296W-1-103LF |
|  | R39, R40 | Не устанавливать | 2 |  |
|  | R41, R42 | Резистор подстроечный 10 кОм±10% | 2 | Bourns  3296W-1-103LF |
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|  | R43 | Не устанавливать | 1 |  |
|  | R44-R46 | 0805-3 кОм±5% | 3 | YAGEO  RC0805JR-073KL |
|  | R47 | 1206-300 Ом±5% | 1 | YAGEO  RC1206JR-07300RL |
|  | R48-R50 | Не устанавливать | 3 |  |
|  | R51 | 0805-6,8 кОм±5% | 1 | YAGEO  RC0805JR-076K8L |
|  | R52 | 0805-3 кОм±5% | 1 | YAGEO  RC0805JR-073KL |
|  | R53-R57 | 0805-1 кОм±5% | 5 | YAGEO  RC0805JR-071KL |
|  | R58, R59 | 0805-6,8 кОм±5% | 2 | YAGEO  RC0805JR-076K8L |
|  | R60-R63 | 0805-10 кОм±5% | 4 | YAGEO  RC0805JR-0710KL |
|  | R64 | 0805-47 кОм±5% | 1 | YAGEO  RC0805JR-0747KL |
|  | R65-R68 | 0805-12 кОм±5% | 4 | YAGEO  RC0805JR-0712KL |
|  | R69 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R70 | 0805-2 кОм±5% | 1 | YAGEO  RC0805JR-072KL |
|  | R71-R74 | 0805-1 кОм±5% | 4 | YAGEO  RC0805JR-071KL |
|  | R75 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R76, R77 | 0805-20 кОм±5% | 2 | YAGEO  RC0805JR-0720KL |
|  | R78, R79 | 0805-10 кОм±5% | 2 | YAGEO  RC0805JR-0710KL |
|  | R80, R81 | 0805-20 кОм±5% | 2 | YAGEO  RC0805JR-0720KL |
|  | R82 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R83 | Резистор переменный 10 кОм±10% | 1 | Song Huei Electronic  R-0901N-A10K |
|  | R84, R85 | 0805-100 Ом±5% | 2 | YAGEO  RC0805JR-07100RL |
|  | R86 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R87 | 0805-10 кОм±1% | 1 | YAGEO  RC0805FR-0710KL |
|  | R88, R89 | 0805-15,8 кОм±1% | 2 | YAGEO  RC0805FR-0715K8L |
|  | R90 | 0805-22 кОм±1% | 2 | YAGEO  RC0805FR-0722KL |
|  | R91 | 0805-100 кОм±5% | 1 | YAGEO  RC0805JR-07100KL |
|  | R92 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
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|  | R93 | 0805-100 кОм±5% | 1 | YAGEO  RC0805JR-07100KL |
|  | R94-R97 | 0805-10 кОм±5% | 4 | YAGEO  RC0805JR-0710KL |
|  | R98 | 0805-3 кОм±1% | 1 | YAGEO  RC0805FR-073KL |
|  | R99 | 0805-300 Ом±5% | 1 | YAGEO  RC0805JR-07300RL |
|  | R100, R101 | 0805-10 кОм±5% | 2 | YAGEO  RC0805JR-0710KL |
|  | R102 | 0805-3,6 кОм±1% | 1 | YAGEO  RC0805FR-073K6L |
|  | R103 | 1206-200 Ом±1% | 1 | YAGEO  RC1206FR-07200RL |
|  | R104 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R105, R106 | 0805-330 Ом±5% | 2 | YAGEO  RC0805JR-07330RL |
|  | R107 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R108 | 0805-330 Ом±5% | 1 | YAGEO  RC0805JR-07330RL |
|  | R109 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R110 | 2512-5,1 кОм±5% | 1 | YAGEO  RC2512JK-075K1L |
|  | R111-R125 | 0805-330 Ом±5% | 15 | YAGEO  RC0805JR-07330RL |
|  | R126 | 1206-10 кОм±5% | 1 | YAGEO  RC1206JR-0710KL |
|  | R127-R130 | 0805-330 Ом±5% | 4 | YAGEO  RC0805JR-07330RL |
|  | R131-R160 | 0805-3,3 кОм±5% | 29 | YAGEO  RC0805JR-073K3L |
|  | R161 | 0805-10 кОм±5% | 1 | YAGEO  RC0805JR-0710KL |
|  | R162 | 0805-1 кОм±5% | 1 | YAGEO  RC0805JR-071KL |
|  | R163-R179 | 0805-5,1 кОм±5% | 17 | YAGEO  RC0805JR-075K1L |
|  | R180 | Варистор V120ZA4P | 1 | Littlefuse |
|  | R181 | 2512-15 кОм±5% | 1 | YAGEO  RC2512JK-0715KL |
|  | R182 | Варистор B72210S0251K101 | 1 | EPCOS |
|  | R183, R184 | 2512-22 кОм±5% | 2 | YAGEO  RC2512JK-0722KL |
|  | R185 | 1210-8,2 кОм±5% | 1 | YAGEO  RC1210JR-078K2L |
|  | R186 | 0805-47 кОм±5% | 1 | YAGEO  RC0805JR-0747KL |
|  | R187 | 1206-1 кОм±5% | 1 | YAGEO  RC1206JR-071KL |
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|  | R188 | 1206-510 Ом±5% | 1 | YAGEO  RC1206JR-07510RL |
|  | R189 | 2010-51 Ом±5% | 1 | YAGEO  RC2010JK-0751RL |
|  | R190, R191 | 1206-1 кОм±5% | 2 | YAGEO  RC1206JR-071KL |
|  | R192 | 0805-3,9 кОм±5% | 1 | YAGEO  RC0805JR-073K9L |
|  | R193 | 1206-0 Ом±5% | 1 | YAGEO  RC1206JR-070RL |
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|  | S1 | Переключатель KLS7-SS-12F19-G5 | 1 | KLS |
|  | S2-S4 | Кнопка тактовая TS-A6PV-130 | 3 | Switronic  Industrial |
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|  | T1-T7 | Трансформатор SM-LP-5001 | 7 | Bourns |
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|  | V1-V10 | Диод LL4148 | 10 | Vishay |
|  | V11 | Транзистор MMBFJ177 | 1 | Fairchild  Semiconductor |
|  | V12, V13 | Диод LL4148 | 2 | Vishay |
|  | V14 | Транзистор BC817-40.215 | 1 | NXP  Semiconductor |
|  | V15 | Транзистор BC807-40.215 | 1 | NXP  Semiconductor |
|  | V16, V17 | Оптопара HCPL-181-06AE | 2 | Broadcom |
|  | V18 | Транзистор IRLML2803TRPBF | 1 | Infenion |
|  | V19 | Диод LL4002 | 1 | Vishay |
|  | V20, V21 | Стабилитрон BZV55C20 | 2 | NXP |
|  | V22 | Стабилитрон BZV55C4V7 | 1 | Rectron |
|  | V23-V25 | Оптопара HCPL-181-06AE | 2 | Broadcom |
|  | V26 | Диодный мост MB6S | 1 | ON  Semiconductor |
|  | V27 | Диодный мост DB156S | 1 | Rectron |
|  | V28 | Транзистор IRFR5410TRLPBF | 1 | Infineon  Technologies |
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|  | X1 | Розетка NCJ6FA-H | 1 | Neutrik |
|  | X2 | Вилка FDC-10 | 1 | Connfly |
|  | X3 | Розетка IDC-40MS | 1 | Connfly |
|  | X4 | Вилка PWL2-05 | 1 | Connfly |
|  | X5 | Вилка PWL2-02 | 1 | Connfly |
|  | X6 | Вилка CWF-3 | 1 | Connfly |
|  | X7, X8 | Вилка CWF-2 | 2 | Connfly |
|  | X9, X10 | Розетка IDC-10MS | 2 | Connfly |
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|  | Z1 | Резонатор кварцевый KX-3HT HC-49/U8H 8 MHz±30ppm | 1 | Geyer Electronic |
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| Изм. | Номера листов (страниц) | | | | Всего листов (страниц) в документе | №  докум. | Входящий № сопроводительного докум. и дата | Подпись | Дата |
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| измененных | замененных | новых | аннулированных |
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