

# **CCS Technical Documentation**

## **NAM-2 Series Transceivers**

## **Parts List**

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## Parts list of DF9 (03a) Code: 0201910

| Item | Code    | Side   | X | Y | Description     | Type, data        |                  |             |
|------|---------|--------|---|---|-----------------|-------------------|------------------|-------------|
| B100 | 4510293 | Top    | L | 5 | CRYSTAL         | -20PPM<br>12.5PF  | 32.768kHz        |             |
| B301 | 5140211 | Bottom | B | 7 | BUZZER          | 85DB<br>3KHZ 3.0V | 10.4X8.7X<br>3.1 |             |
| C101 | 2320548 | Top    | K | 5 | Chip cap 5% NPO | 33p               | 50V              | 0402C       |
| C102 | 2320538 | Top    | L | 4 | Chip cap 5% NPO | 12p               | 50V              | 0402C       |
| C103 | 2312411 | Top    | O | 5 | Chip cap X5R    | 1u0               | 25V              | 1206_BLM    |
| C104 | 2320783 | Top    | O | 7 | Chip cap X7R 3  | 33n               | 10V              | 0402C       |
| C105 | 2312227 | Top    | N | 6 | Chip cap Y5V 4  | 4u7               | 10V              | 0805C_H1.35 |
| C106 | 2320481 | Top    | I | 4 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C107 | 2320481 | Top    | L | 6 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C108 | 2312401 | Top    | J | 3 | Chip cap X5R    | 1u0               | 10V              | 0805C       |
| C109 | 2320544 | Top    | O | 7 | Chip cap        | 22p               | 50V              | 0402C       |
| C110 | 2320544 | Top    | P | 7 | Chip cap NPO    | 22p               | 50V              | 0402C       |
| C113 | 2320508 | Top    | K | 4 | Chip cap NPO    | 1p0               | 50V              | 0402C       |
| C114 | 2320546 | Top    | O | 5 | Chip cap NPO    | 27p               | 50V              | 0402C       |
| C116 | 2312401 | Top    | L | 6 | Chip cap X5R    | 1u0               | 10V              | 0805C       |
| C119 | 2320481 | Top    | O | 4 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C120 | 2320778 | Top    | L | 5 | Chip cap X7R    | 10n               | 16V              | 0402C       |
| C121 | 2320778 | Top    | M | 6 | Chip cap X7R 1  | 10n               | 16V              | 0402C       |
| C127 | 2320805 | Top    | O | 3 | Chip cap X5R    | 100n              | 10V              | 0402C       |
| C128 | 2312401 | Top    | O | 4 | Chip cap X5R    | 1u0               | 10V              | 0805C       |
| C129 | 2312401 | Top    | I | 6 | Chip cap X5R 1  | 1u0               | 10V              | 0805C       |
| C131 | 2611719 | Top    | K | 3 | Chip Tcap       |                   | 10u_10V          |             |
| C132 | 2611741 | Top    | K | 4 | Chip Tcap       |                   | 4u7_10V          |             |
| C133 | 2320481 | Top    | I | 4 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C140 | 2320481 | Top    | K | 6 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C142 | 2312227 | Top    | O | 7 | Chip cap        | Y5V Z 10V         | 4u7              | 0805C_H1.35 |
| C150 | 2320481 | Top    | I | 5 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C151 | 2320481 | Top    | I | 5 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C152 | 2320481 | Top    | I | 3 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |
| C153 | 2320481 | Top    | I | 4 | Chip cap X5R    | 1u0               | 6.3V             | 0603C       |

| Item | Code    | Side | X | Y | Description     | Type, data |         |             |
|------|---------|------|---|---|-----------------|------------|---------|-------------|
| C154 | 2320481 | Top  | I | 5 | Chip cap X5R    | 1u0        | 6.3V    | 0603C       |
| C160 | 2320546 | Top  | M | 6 | Chip cap 5%     | 27p        | 50V     | 0402C       |
| C161 | 2320546 | Top  | K | 6 | Chip cap 5% N   | 27p        | 50V     | 0402C       |
| C162 | 2320540 | Top  | C | 5 | Chip cap 5%     | 15p        | 50V     | 0402C       |
| C163 | 2320540 | Top  | C | 5 | Chip cap 5% NPO | 15p        | 50V     | 0402C       |
| C165 | 2611737 | Top  | I | 7 | Chip Tcap       | 7.3X4.3X2  | 68u_16V | TANT_TPSY   |
| C201 | 2320783 | Top  | O | 4 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C203 | 2320778 | Top  | N | 5 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C204 | 2320778 | Top  | L | 3 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C205 | 2610203 | Top  | L | 2 | Chip Tcap       | 2U2 M 10V  | 2u2_10V | TANTAL_TAJR |
| C206 | 2320778 | Top  | M | 2 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C208 | 2320778 | Top  | L | 4 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C209 | 2320778 | Top  | N | 2 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C211 | 2320783 | Top  | O | 3 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C212 | 2320779 | Top  | O | 1 | Chip cap X7R    | 100n       | 16V     | 0603_BLM    |
| C213 | 2320744 | Top  | O | 3 | Chip cap X7R    | 1n0        | 50V     | 0402C       |
| C217 | 2320778 | Top  | O | 2 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C218 | 2320546 | Top  | L | 4 | Chip cap 5%     | 27p        | 50V     | 0402C       |
| C220 | 2320778 | Top  | L | 1 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C247 | 2320778 | Top  | M | 7 | Chip cap X7R    | 10n        | 16V     | 0402C       |
| C248 | 2320481 | Top  | K | 7 | Chip cap X5R    | 1u0        | 6.3V    | 0603C       |
| C251 | 2320783 | Top  | K | 8 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C253 | 2320783 | Top  | M | 7 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C255 | 2320744 | Top  | N | 8 | Chip cap X7R    | 1n0        | 50V     | 0402C       |
| C257 | 2320783 | Top  | M | 8 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C258 | 2320783 | Top  | M | 8 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C259 | 2320783 | Top  | M | 7 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C261 | 2320744 | Top  | N | 8 | Chip cap X7R    | 1n0        | 50V     | 0402C       |
| C262 | 2320783 | Top  | M | 7 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C263 | 2320783 | Top  | M | 7 | Chip cap X7R    | 33n        | 10V     | 0402C       |
| C264 | 2320544 | Top  | M | 6 | Chip cap 5%     | 22p        | 50V     | 0402C       |
| C268 | 2320481 | Top  | M | 6 | Chip cap X5R    | 1u0        | 6.3V    | 0603C       |

| Item | Code    | Side   | X | Y | Description    | Type, data      |          |             |
|------|---------|--------|---|---|----------------|-----------------|----------|-------------|
| C270 | 2610207 | Top    | 0 | 7 | Chip Tcap      | 2.0X1.3X1.<br>2 | 10u_6.3V | TANTAL_TAJR |
| C274 | 2320544 | Top    | M | 7 | Chip cap 5% N  | 22p             | 50V      | 0402C       |
| C276 | 2320481 | Top    | M | 7 | Chip cap X5R   | 1u0             | 6.3V     | 0603C       |
| C278 | 2320544 | Top    | N | 7 | Chip cap 5%    | 22p             | 50V      | 0402C       |
| C285 | 2320598 | Top    | R | 3 | Chip cap 5%    | 3n9             | 50V      | 0402C       |
| C286 | 2320598 | Top    | R | 3 | Chip cap 5%    | 3n9             | 50V      | 0402C       |
| C287 | 2320744 | Top    | R | 2 | Chip cap X7R   | 1n0             | 50V      | 0402C       |
| C291 | 2320546 | Top    | K | 7 | Chip cap 5%    | 27p             | 50V      | 0402C       |
| C292 | 2320546 | Top    | K | 7 | Chip cap 5%    | 27p             | 50V      | 0402C       |
| C293 | 2320544 | Top    | N | 7 | Chip cap 5%    | 22p             | 50V      | 0402C       |
| C294 | 2320744 | Top    | N | 8 | Chip cap X7R   | 1n0             | 50V      | 0402C       |
| C295 | 2320744 | Top    | N | 7 | Chip cap X7R 2 | 1n0             | 50V      | 0402C       |
| C296 | 2610207 | Top    | N | 7 | Chip Tcap      | 2.0X1.3X1.<br>2 | 10u_6.3V | TANTAL_TAJR |
| C297 | 2610207 | Top    | N | 8 | Chip Tcap      | 2.0X1.3X1.<br>2 | 10u_6.3V | TANTAL_TAJR |
| C310 | 2312401 | Bottom | C | 8 | Chip cap X5R   | 1u0             | 10V      | 0805C       |
| C330 | 2320481 | Top    | J | 6 | Chip cap X5R   | 1u0             | 6.3V     | 0603C       |
| C331 | 2320779 | Top    | I | 5 | Chip cap X7R   | 100n            | 16V      | 0603_BLM    |
| C342 | 2320560 | Bottom | B | 3 | Chip cap 5%    | 100p            | 50V      | 0402C       |
| C405 | 2320544 | Top    | Q | 7 | Chip cap 5%    | 22p             | 50V      | 0402C       |
| C510 | 2320135 | Top    | G | 5 | Chip cap X7R   | 150n            | 10V      | 0603C       |
| C511 | 2320135 | Top    | H | 6 | Chip cap X7R   | 150n            | 10V      | 0603C       |
| C512 | 2320135 | Top    | G | 6 | Chip cap X7R   | 150n            | 10V      | 0603C       |
| C513 | 2320135 | Top    | G | 6 | Chip cap X7R 1 | 150n            | 10V      | 0603C       |
| C520 | 2320485 | Top    | G | 5 | Chip cap NPO   | 470p            | 50V      | 0603C       |
| C521 | 2320485 | Top    | H | 5 | Chip cap NPO   | 470p            | 50V      | 0603C       |
| C522 | 2320485 | Top    | G | 6 | Chip cap NPO   | 470p            | 50V      | 0603C       |
| C523 | 2320485 | Top    | G | 6 | Chip cap NPO   | 470p            | 50V      | 0603C       |
| C530 | 2320631 | Top    | H | 5 | Chip cap NPO   | 180p            | 25V      | 0402C       |
| C531 | 2320631 | Top    | H | 5 | Chip cap NPO   | 180p            | 25V      | 0402C       |
| C532 | 2320781 | Top    | H | 5 | Chip cap X7R   | 47n             | 16V      | 0603C       |
| C533 | 2320781 | Top    | H | 4 | Chip cap X7R   | 47n             | 16V      | 0603C       |

| Item | Code    | Side | X | Y | Description     | Type, data |     |       |
|------|---------|------|---|---|-----------------|------------|-----|-------|
| C534 | 2320783 | Top  | H | 4 | Chip cap X7R    | 33n        | 10V | 0402C |
| C535 | 2320546 | Top  | H | 4 | Chip cap 5%     | 27p        | 50V | 0402C |
| C540 | 2320552 | Top  | H | 5 | Chip cap 5% NPO | 47p        | 50V | 0402C |
| C541 | 2320552 | Top  | H | 4 | Chip cap 5%     | 47p        | 50V | 0402C |
| C550 | 2320598 | Top  | G | 3 | Chip cap 5%     | 3n9        | 50V | 0402C |
| C557 | 2320554 | Top  | E | 4 | Chip cap        | 56p        | 50V | 0402C |
| C560 | 2320548 | Top  | F | 3 | Chip cap 5%     | 33p        | 50V | 0402C |
| C561 | 2320620 | Top  | H | 4 | Chip cap X7R    | 10n        | 16V | 0402C |
| C562 | 2320546 | Top  | H | 4 | Chip cap 5%     | 27p        | 50V | 0402C |
| C564 | 2320783 | Top  | H | 4 | Chip cap X7R    | 33n        | 10V | 0402C |
| C600 | 2320560 | Top  | F | 5 | Chip cap 5%     | 100p       | 50V | 0402C |
| C601 | 2320560 | Top  | F | 5 | Chip cap 5%     | 100p       | 50V | 0402C |
| C610 | 2320602 | Top  | C | 7 | Chip cap +-     | 4p7        | 50V | 0402C |
| C611 | 2320584 | Top  | E | 7 | Chip cap 5%     | 1n0        | 50V | 0402C |
| C612 | 2320556 | Top  | E | 7 | Chip cap 5% NPO | 68p        | 50V | 0402C |
| C613 | 2320556 | Top  | C | 7 | Chip cap 5% NPO | 68p        | 50V | 0402C |
| C614 | 2320556 | Top  | C | 5 | Chip cap 5% NPO | 68p        | 50V | 0402C |
| C615 | 2320560 | Top  | C | 7 | Chip cap 5% NPO | 100p       | 50V | 0402C |
| C620 | 2320805 | Top  | F | 7 | Chip cap X5R    | 100n       | 10V | 0402C |
| C621 | 2320805 | Top  | F | 7 | Chip cap X5R    | 100n       | 10V | 0402C |
| C630 | 2320530 | Top  | E | 5 | Chip cap        | 5p6        | 50V | 0402C |
| C631 | 2320530 | Top  | F | 5 | Chip cap 0      | 5p6        | 50V | 0402C |
| C640 | 2320516 | Top  | D | 7 | Chip cap        | 1p5        | 50V | 0402C |
| C642 | 2320584 | Top  | F | 8 | Chip cap        | 1n0        | 50V | 0402C |
| C643 | 2320540 | Top  | D | 7 | Chip cap 5 NPO  | 15p        | 50V | 0402C |
| C644 | 2320530 | Top  | D | 7 | Chip cap NPO    | 5p6        | 50V | 0402C |
| C645 | 2320540 | Top  | C | 5 | Chip cap NPO    | 15p        | 50V | 0402C |
| C700 | 2320540 | Top  | B | 7 | Chip cap NPO    | 15p        | 50V | 0402C |
| C702 | 2320602 | Top  | A | 4 | Chip cap NPO    | 4p7        | 50V | 0402C |
| C703 | 2320532 | Top  | D | 3 | Chip cap NPO    | 6p8        | 50V | 0402C |
| C704 | 2320584 | Top  | D | 3 | Chip cap X7R    | 1n0        | 50V | 0402C |
| C714 | 2320783 | Top  | E | 4 | Chip cap X7R    | 33n        | 10V | 0402C |

| Item | Code    | Side | X | Y | Description           | Type, data  |         |             |
|------|---------|------|---|---|-----------------------|-------------|---------|-------------|
| C720 | 2320556 | Top  | A | 5 | Chip cap 5% NPO       | 68p         | 50V     | 0402C       |
| C730 | 2320546 | Top  | C | 5 | Chip cap 5% NPO       | 27p         | 50V     | 0402C       |
| C731 | 2320756 | Top  | E | 5 | Chip cap X7R          | 3n3         | 50V     | 0402C       |
| C733 | 2320546 | Top  | B | 5 | Chip cap 5%           | 27p         | 50V     | 0402C       |
| C741 | 2320540 | Top  | E | 3 | Chip cap 5% NPO       | 15p         | 50V     | 0402C       |
| C743 | 2320538 | Top  | B | 5 | Chip cap 5% NPO       | 12p         | 50V     | 0402C       |
| C746 | 2320548 | Top  | E | 4 | Chip cap 5% NPO       | 33p         | 50V     | 0402C       |
| C747 | 2320540 | Top  | E | 4 | Chip cap 5% NPO       | 15p         | 50V     | 0402C       |
| C749 | 2320584 | Top  | E | 2 | Chip cap 5% X7R       | 1n0         | 50V     | 0402C       |
| C755 | 2320481 | Top  | D | 3 | Chip cap X5R 1        | 1u0         | 6.3V    | 0603C       |
| C757 | 2320514 | Top  | C | 1 | Chip cap NPO          | 1p2         | 50V     | 0402C       |
| C758 | 2320584 | Top  | D | 2 | Chip cap 5% X7R       | 1n0         | 50V     | 0402C       |
| C759 | 2320546 | Top  | E | 2 | Chip cap 5% NPO       | 27p         | 50V     | 0402C       |
| C760 | 2320526 | Top  | C | 2 | Chip cap NPO          | 3p9         | 50V     | 0402C       |
| C761 | 2320536 | Top  | B | 5 | Chip cap 5% NPO       | 10p         | 50V     | 0402C       |
| C762 | 2320536 | Top  | E | 5 | Chip cap 5% NPO       | 10p         | 50V     | 0402C       |
| C776 | 2320540 | Top  | F | 4 | Chip cap 5% NPO       | 15p         | 50V     | 0402C       |
| C782 | 2320524 | Top  | G | 1 | Chip cap NPO          | 3p3         | 50V     | 0402C       |
| C783 | 2312401 | Top  | G | 2 | Chip cap X5R          | 1u0         | 10V     | 0805C       |
| C785 | 2320805 | Top  | F | 1 | Chip cap X5R 1        | 100n        | 10V     | 0402C       |
| C789 | 2320518 | Top  | D | 2 | Chip cap NPO          | 1p8         | 50V     | 0402C       |
| C790 | 2320518 | Top  | D | 2 | Chip cap NPO          | 1p8         | 50V     | 0402C       |
| C792 | 2320560 | Top  | F | 4 | Chip cap 5% NPO       | 100p        | 50V     | 0402C       |
| C793 | 2320540 | Top  | H | 3 | Chip cap 5% NPO       | 15p         | 50V     | 0402C       |
| C799 | 2320526 | Top  | E | 3 | Chip cap NPO          | 3p9         | 50V     | 0402C       |
| C801 | 2320564 | Top  | J | 2 | Chip cap 5% NPO       | 150p        | 50V     | 0402C       |
| C802 | 2312221 | Top  | J | 2 | Chip cap              | 25V         | 4n7     | 0805C_H1.35 |
| C803 | 2320576 | Top  | J | 2 | Chip cap 5% X7R       | 470p        | 50V     | 0402C       |
| C804 | 2320518 | Top  | H | 2 | Chip cap +-0.25pF NPO | 1p8         | 50V     | 0402C       |
| C805 | 2610203 | Top  | G | 2 | Chip Tcap             | 2.0X1.3X1.2 | 2u2_10V | TANTAL_TAJR |
| C829 | 2320560 | Top  | G | 6 | Chip cap 5% NPO       | 100p        | 50V     | 0402C       |

| Item | Code    | Side | X | Y | Description     | Type, data          |                  |                    |
|------|---------|------|---|---|-----------------|---------------------|------------------|--------------------|
| C830 | 2320560 | Top  | H | 6 | Chip cap 5% NPO | 100p                | 50V              | 0402C              |
| C831 | 2310793 | Top  | G | 8 | Chip cap X5R    | 2u2                 | 10V              | 0805C              |
| C832 | 2320620 | Top  | G | 8 | Chip cap X7R    | 10n                 | 16V              | 0402C              |
| C833 | 2320584 | Top  | H | 6 | Chip cap 5% X7R | 1n0                 | 50V              | 0402C              |
| C834 | 2320584 | Top  | F | 7 | Chip cap 5% X7R | 1n0                 | 50V              | 0402C              |
| C835 | 2320540 | Top  | F | 7 | Chip cap 5% NPO | 15p                 | 50V              | 0402C              |
| C836 | 2320544 | Top  | G | 8 | Chip cap 5% NPO | 22p                 | 50V              | 0402C              |
| C837 | 2320526 | Top  | H | 3 | Chip cap NPO    | 3p9                 | 50V              | 0402C              |
| C860 | 2320548 | Top  | F | 2 | Chip cap 5% NPO | 33p                 | 50V              | 0402C              |
| C861 | 2320621 | Top  | F | 3 | Chip cap NPO    | 0p5                 | 50V              | 0402C              |
| C862 | 2320520 | Top  | C | 1 | Chip cap NPO    | 2p2                 | 50V              | 0402C              |
| C863 | 2320536 | Top  | D | 1 | Chip cap 5% NPO | 10p                 | 50V              | 0402C              |
| C864 | 2320524 | Top  | D | 1 | Chip cap NPO    | 3p3                 | 50V              | 0402C              |
| D200 | 4370687 | Top  | N | 4 | MAD2WD1         | V16                 | F741541F<br>C05  | uBGA144            |
| D210 | 4340747 | Top  | P | 2 | COMBO MEMORY    | 16Mx16/2Mx16        |                  | uBGA_72            |
| F101 | 5119019 | Top  | Q | 6 | SM FUSE F       | 32V                 | 1.5A             | 0603_FUSE          |
| G800 | 4350249 | Top  | I | 2 | VCO             | 2.7V<br>20MA PDC    | 3420-<br>3840MHz | VCO_ENFVZ5F<br>47B |
| G830 | 4510261 | Top  | H | 7 | VCTCXO          | +/-5PPM<br>2.7V GSM | 26MHz            | VCTCXO_KT16        |
| L103 | 3203743 | Top  | E | 3 | Ferrite.bead    | 0R03 3A             | 42R/<br>100MHz   | 0805_BLM21         |
| L104 | 3203743 | Top  | Q | 6 | Ferrite.bead    | 0R03 3A<br>0805     | 42R/<br>100MHz   | 0805_BLM21         |
| L271 | 3203709 | Top  | K | 8 | Ferrite Bead    | 120R/<br>100MHz     | ~                | 0402L              |
| L272 | 3203709 | Top  | K | 7 | Ferrite Bead    | 120R/<br>100MHz     | ~                | 0402L              |
| L283 | 3203741 | Top  | S | 3 | Ferrite Bead    | 600R/<br>100MHz     | ~                | 0603_BLM           |
| L284 | 3203741 | Top  | S | 3 | Ferrite Bead    | 600R/<br>100MHz     | ~                | 0603_BLM           |
| L287 | 3203709 | Top  | R | 2 | Ferrite Bead    | 120R/<br>100MHz     | ~                | 0402L              |
| L503 | 3646051 | Top  | C | 2 | Chip Coil       | 3n9H                | ~                | 0402L              |

| Item | Code    | Side   | X | Y | Description      | Type, data                   |                  |                     |
|------|---------|--------|---|---|------------------|------------------------------|------------------|---------------------|
| L504 | 3646063 | Top    | F | 3 | Chip Coil        | 22nH                         | ~                | 0402L               |
| L505 | 3646051 | Top    | F | 3 | Chip Coil        | 3n9H                         | ~                | 0402L               |
| L506 | 3646053 | Top    | C | 2 | Chip Coil        | 4n7H                         | ~                | 0402L               |
| L510 | 3646059 | Top    | B | 7 | Chip Coil        | 5n6H                         | 800M             | 0402L               |
| L553 | 4551021 | Top    | A | 5 | DIR COUPLER      | 2.1X1.3                      | 897.5174.<br>5 M | COUPLER_LDC<br>15D  |
| L600 | 3646069 | Top    | F | 5 | Chip Coil        | 33nH                         | Q23/800M         | 0402L               |
| L631 | 3646065 | Top    | F | 5 | Chip Coil 1      | 12nH                         | Q31/800M         | 0402L               |
| L751 | 3203743 | Top    | D | 3 | Ferrite .bead    | 0R03 3A                      | 42R/<br>100MHz   | 0805_BLM21          |
| L752 | 3645201 | Top    | D | 3 | Chip Coil        | Q38/<br>200MHZ               | 56nH             | COIL_0603CS         |
| L800 | 3645073 | Top    | F | 8 | Chip Coil        | 0.015A<br>1.150HM<br>0805    | 10uH             | COIL_LK_2125        |
| M300 | 9854573 | Top    | R | 2 | Lifting PWB      | FOR VIBRA                    | ~                | VIBRA_BLOCK         |
| N100 | 4370719 | Top    | J | 4 | CCONT2M          | WFD163M<br>G64T/8            | ~                | uBGA64_P0.8         |
| N101 | 4370621 | Top    | O | 6 | CHAPS V2.0       | U423V2G3<br>6T               | ~                | LBGA_36             |
| N220 | 4340413 | Top    | L | 2 | VOLT REG         | TK11230B<br>MC               | 3.0V             | SOT23_L             |
| N250 | 4370793 | Top    | L | 7 | COBBA_GJP V4.1   | V257JG64<br>T/8              | ~                | uBGA64_H1.6         |
| N310 | 4370433 | Bottom | B | 2 | UISWITCH ASIC    | ~                            | ~                | TSSOP_20            |
| N505 | 4370781 | Top    | G | 4 | HAGAR 5          | LFBGA80                      | ~                | uBGA80_H1.7         |
| N600 | 4340719 | Top    | F | 2 | VOLT REG         | TK11247B<br>MC               | 4.7 V            | SOT23_L             |
| N702 | 4350203 | Top    | B | 3 | PW AMP           | 880-915/1710-1785MHZ<br>3.5V |                  | RF_AMP_PF08<br>103B |
| R100 | 1430826 | Top    | K | 5 | Chipres 5% 63mW  | 680k                         | ~                | 0402R               |
| R101 | 1430145 | Top    | O | 4 | Chipres 0W06     | 100k                         | ~                | 0402R               |
| R102 | 1430796 | Top    | K | 5 | Resistor 5% 63mW | 47k                          | ~                | 0402R               |
| R103 | 1430803 | Top    | O | 4 | Chipres 0W06 4K  | 4k7                          | ~                | 0402R               |
| R104 | 1430796 | Top    | O | 4 | Resistor 5% 63mW | 47k                          | ~                | 0402R               |
| R109 | 1620017 | Top    | O | 7 | Res Network      | 2x100R                       | ~                | 0404_R              |
| R118 | 1430778 | Top    | K | 2 | Resistor 5% 63mW | 10k                          | ~                | 0402R               |

| Item | Code    | Side | X | Y | Description                  | Type, data |        |           |
|------|---------|------|---|---|------------------------------|------------|--------|-----------|
| R120 | 1620025 | Top  | L | 6 | Chipres Array<br>0W06 J 0404 | 2x100k     | ~      | 0404_R    |
| R122 | 1620019 | Top  | M | 5 | Res Network                  | 2x10k      | ~      | 0404_R    |
| R124 | 1430726 | Top  | P | 5 | Resistor 5% 63mW             | 100R       | ~      | 0402R     |
| R125 | 1430726 | Top  | P | 5 | Resistor 5% 63mW             | 100R       | ~      | 0402R     |
| R128 | 1430718 | Top  | K | 4 | Resistor 5% 63mW             | 47R        | ~      | 0402R     |
| R131 | 1419003 | Top  | P | 6 | Chipres 0W5                  | 0R22       | ~      | 1210_R    |
| R154 | 1430325 | Top  | K | 4 | Chipres 0W06                 | 2M2        | ~      | 0603R     |
| R201 | 1430812 | Top  | N | 5 | Resistor 5% 63mW             | 220k       | ~      | 0402R     |
| R202 | 1430145 | Top  | L | 4 | Chipres 0W06                 | 100k       | ~      | 0402R     |
| R203 | 1430803 | Top  | M | 5 | Chipres 0W06                 | 4k7        | ~      | 0402R     |
| R211 | 1430778 | Top  | O | 2 | Resistor 5% 63mW             | 10k        | ~      | 0402R     |
| R212 | 1430690 | Top  | N | 2 | Chipres 0W06<br>jumper       | 0R         | ~      | 0402R     |
| R213 | 1430800 | Top  | M | 1 | Resistor 5% 63mW             | 68k        | ~      | 0402R     |
| R214 | 1430796 | Top  | M | 1 | Resistor 5% 63mW             | 47k        | ~      | 0402R     |
| R215 | 1430796 | Top  | N | 5 | Resistor 5% 63mW             | 47k        | ~      | 0402R     |
| R216 | 1430796 | Top  | M | 5 | Resistor 5% 63mW             | 47k        | ~      | 0402R     |
| R217 | 1430690 | Top  | L | 3 | Chipres 0W06<br>jumper       | 0R         | ~      | 0402R     |
| R252 | 1430754 | Top  | N | 7 | Resistor 5% 63mW             | 1k0        | ~      | 0402R     |
| R256 | 1430718 | Top  | N | 8 | Resistor 5% 63mW             | 47R        | ~      | 0402R     |
| R257 | 1430718 | Top  | M | 8 | Resistor 5% 63mW             | 47R        | ~      | 0402R     |
| R258 | 1430744 | Top  | N | 6 | Resistor 5% 63mW             | 470R       | ~      | 0402R     |
| R260 | 1430726 | Top  | N | 7 | Resistor 5% 63mW             | 100R       | ~      | 0402R     |
| R261 | 1430744 | Top  | M | 7 | Resistor 5% 63mW             | 470R       | ~      | 0402R     |
| R265 | 1430145 | Top  | M | 7 | Chipres 0W06 100             | 100k       | ~      | 0402R     |
| R266 | 1430806 | Top  | M | 7 | Resistor 5% 63mW             | 120k       | ~      | 0402R     |
| R267 | 1430762 | Top  | N | 7 | Resistor 5% 63mW             | 2k2        | ~      | 0402R     |
| R268 | 1430744 | Top  | N | 7 | Resistor 5% 63mW             | 470R       | ~      | 0402R     |
| R269 | 1620025 | Top  | J | 8 | Res Network                  | 0W06       | 2x100k | 0404_R_SR |
| R270 | 1430792 | Top  | P | 8 | Resistor 5% 63mW             | 33k        | ~      | 0402R     |
| R271 | 1430145 | Top  | M | 6 | Chipres 0W06                 | 100k       | ~      | 0402R     |
| R272 | 1430145 | Top  | N | 6 | Chipres 0W06                 | 100k       | ~      | 0402R     |

| Item | Code    | Side   | X | Y | Description      | Type, data       |        |           |
|------|---------|--------|---|---|------------------|------------------|--------|-----------|
| R273 | 1430792 | Top    | N | 7 | Resistor 5% 63mW | 33k              | ~      | 0402R     |
| R274 | 1430812 | Top    | N | 7 | Resistor 5% 63mW | 220k             | ~      | 0402R     |
| R275 | 1430762 | Top    | M | 8 | Resistor 5% 63mW | 2k2              | ~      | 0402R     |
| R276 | 1430762 | Top    | M | 7 | Resistor 5% 63mW | 2k2              | ~      | 0402R     |
| R277 | 1430145 | Top    | N | 6 | Chipres 0W06 102 | 100k             | ~      | 0402R     |
| R278 | 1430762 | Top    | O | 3 | Resistor 5% 63mW | 2k2              | ~      | 0402R     |
| R281 | 1620017 | Top    | R | 3 | Res Network R    | 2x100R           | ~      | 0404_R    |
| R283 | 1825033 | Top    | S | 3 | Chip Varistor    | 14V/46V          | ~      | 0402_VAR  |
| R284 | 1825033 | Top    | S | 3 | Chip Varistor    | 14V/46V          | ~      | 0402_VAR  |
| R285 | 1825033 | Top    | R | 3 | Chip Varistor    | 14V/46V          | ~      | 0402_VAR  |
| R286 | 1825033 | Top    | R | 3 | Chip Varistor    | 14V/46V          | ~      | 0402_VAR  |
| R287 | 1825033 | Top    | R | 2 | Chip Varistor    | 14V/46V          | ~      | 0402_VAR  |
| R310 | 1430780 | Bottom | C | 2 | Resistor 5% 63mW | 12k              | ~      | 0402R     |
| R311 | 1430778 | Bottom | C | 2 | Resistor 5% 63mW | 10k              | ~      | 0402R     |
| R350 | 1430389 | Bottom | D | 2 | Chipres 0w1      | 18R              | ~      | 0603R     |
| R351 | 1430389 | Bottom | D | 2 | Chipres 0w1      | 18R              | ~      | 0603R     |
| R352 | 1430389 | Bottom | D | 2 | Chipres 0w1      | 18R              | ~      | 0603R     |
| R353 | 1430389 | Bottom | D | 2 | Chipres 0w1      | 18R              | ~      | 0603R     |
| R374 | 1430754 | Top    | K | 2 | Resistor 5% 63mW | 1k0              | ~      | 0402R     |
| R510 | 1620063 | Top    | G | 5 | Res Network      | 4x100R           | ~      | MNR04     |
| R530 | 1620019 | Top    | H | 5 | Res Network      | 2x10k            | ~      | 0404_R    |
| R532 | 1430846 | Top    | E | 4 | Resistor 1% 63mW | 2k7              | ~      | 0402R     |
| R533 | 1430778 | Top    | H | 4 | Resistor 5% 63mW | 10k              | ~      | 0402R     |
| R541 | 1620033 | Top    | H | 4 | Res Network      | 2x5k6            | ~      | 0404_R    |
| R546 | 1620033 | Top    | H | 5 | Res Network      | 2x5k6            | ~      | 0404_R    |
| R563 | 1430187 | Top    | H | 4 | Chipres 0W06     | 47k              | ~      | 0402R     |
| R564 | 1430746 | Top    | H | 4 | Resistor 5% 63mW | 560R             | ~      | 0402R     |
| R565 | 1430803 | Top    | H | 4 | Chipres 0w06     | 4k7              | ~      | 0402R     |
| R610 | 1430726 | Top    | C | 7 | Resistor 5% 63mW | 100R             | ~      | 0402R     |
| R611 | 1430846 | Top    | B | 7 | Resistor 1% 63mW | 2k7              | ~      | 0402R     |
| R613 | 1430764 | Top    | C | 7 | Resistor 5% 63mW | 3k3              | ~      | 0402R     |
| R614 | 1620017 | Top    | E | 7 | Res Network      | 0W06<br>2X100R J | 2x100R | 0404_R_SR |

| Item | Code    | Side | X | Y | Description               | Type, data   |                    |            |
|------|---------|------|---|---|---------------------------|--------------|--------------------|------------|
| R640 | 1430732 | Top  | D | 7 | Resistor 5% 63mW          | 180R         | ~                  | 0402R      |
| R643 | 1430764 | Top  | D | 7 | Resistor 5% 63mW          | 3k3          | ~                  | 0402R      |
| R645 | 1430846 | Top  | D | 7 | Resistor 1% 63mW          | 2k7          | ~                  | 0402R      |
| R670 | 1430730 | Top  | E | 4 | Resistor 5% 63mW          | 150R         | ~                  | 0402R      |
| R671 | 1430730 | Top  | F | 4 | Resistor 5% 63mW          | 150R         | ~                  | 0402R      |
| R700 | 1430726 | Top  | F | 3 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R704 | 1430726 | Top  | E | 3 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R710 | 1430702 | Top  | D | 2 | Resistor 5% 63mW          | 12R          | ~                  | 0402R      |
| R711 | 1430734 | Top  | F | 2 | Resistor 5% 63mW          | 220R         | ~                  | 0402R      |
| R712 | 1430702 | Top  | F | 2 | Resistor 5% 63mW          | 12R          | ~                  | 0402R      |
| R723 | 1620505 | Top  | C | 1 | Res Network               | 0W04 2DB ATT | 436R/<br>11R6/436R | 0404_RAC10 |
| R730 | 1430762 | Top  | E | 5 | Resistor 5% 63mW          | 2k2          | ~                  | 0402R      |
| R731 | 1430740 | Top  | C | 5 | Resistor 5% 63mW          | 330R         | ~                  | 0402R      |
| R732 | 1430746 | Top  | C | 5 | Resistor 5% 63mW          | 560R         | ~                  | 0402R      |
| R740 | 1430726 | Top  | F | 3 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R741 | 1430726 | Top  | F | 3 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R742 | 1430726 | Top  | E | 3 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R744 | 1430726 | Top  | E | 4 | Resistor 5% 63mW          | 100R         | ~                  | 0402R      |
| R751 | 1430734 | Top  | D | 2 | Resistor 5% 63mW          | 220R         | ~                  | 0402R      |
| R754 | 1430718 | Top  | B | 5 | Resistor 5% 63mW          | 47R          | ~                  | 0402R      |
| R755 | 1430714 | Top  | D | 2 | Resistor 5% 63mW          | 33R          | ~                  | 0402R      |
| R756 | 1430754 | Top  | D | 2 | Resistor 5% 63mW          | 1k0          | ~                  | 0402R      |
| R757 | 1430754 | Top  | D | 2 | Resistor 5% 63mW          | 1k0          | ~                  | 0402R      |
| R758 | 1430710 | Top  | E | 1 | Resistor 5% 63mW          | 22R          | ~                  | 0402R      |
| R763 | 1430740 | Top  | E | 5 | Resistor 5% 63mW          | 330R         | ~                  | 0402R      |
| R764 | 1430758 | Top  | E | 5 | Resistor 5% 63mW          | 1k5          | ~                  | 0402R      |
| R781 | 1430690 | Top  | G | 1 | Chipres 0W06 jumper       | 0R           | ~                  | 0402R      |
| R790 | 1430121 | Top  | E | 4 | Chipres 0W06 22k F 200ppm | 22k          | ~                  | 0402R      |
| R791 | 1430865 | Top  | E | 4 | Chipres                   | 5k6          | ~                  | 0402R      |
| R792 | 1430848 | Top  | F | 4 | Resistor 1% 63mW          | 12k          | ~                  | 0402R      |
| R800 | 1430778 | Top  | H | 3 | Resistor 5% 63mW          | 10k          | ~                  | 0402R      |

| Item | Code    | Side   | X | Y | Description                   | Type, data            |                    |                      |
|------|---------|--------|---|---|-------------------------------|-----------------------|--------------------|----------------------|
| R801 | 1430841 | Top    | J | 2 | Chipres 0W06 6k8 F 0402       | 6k8                   | ~                  | 0402R                |
| R802 | 1430770 | Top    | J | 2 | Resistor 5% 63mW              | 4k7                   | ~                  | 0402R                |
| R805 | 1620505 | Top    | G | 2 | Res Network                   | 2DB ATT               | 436R/<br>11R6/436R | 0404_RAC10           |
| R807 | 1430728 | Top    | G | 1 | Resistor 5% 63mW              | 120R                  | ~                  | 0402R                |
| R829 | 1430752 | Top    | G | 6 | Resistor 5% 63mW              | 820R                  | ~                  | 0402R                |
| R830 | 1430762 | Top    | G | 7 | Resistor 5% 63mW              | 2k2                   | ~                  | 0402R                |
| R831 | 1430718 | Top    | G | 7 | Resistor 5% 63mW              | 47R                   | ~                  | 0402R                |
| R832 | 1430788 | Top    | G | 8 | Resistor 5% 63mW              | 22k                   | ~                  | 0402R                |
| R833 | 1430762 | Top    | H | 6 | Resistor 5% 63mW              | 2k2                   | ~                  | 0402R                |
| R834 | 1430812 | Top    | G | 7 | Resistor 5% 63mW              | 220k                  | ~                  | 0402R                |
| S330 | 5209001 | Bottom | A | 2 | SM SW TACT SPST               | 12V 50MA<br>SIDE KEY  | ~                  | BUTTON_EVQP<br>UA02  |
| T600 | 4550129 | Top    | F | 6 | BALUN TRANS                   | 900MHZ+/-100MHZ       | 1206               | TRANS_LDB20_25       |
| T630 | 4550139 | Top    | E | 5 | BALUN TRANS                   | 1.8GHZ+-100MHZ        | 1206               | TRANS_LDB20          |
| T700 | 4550129 | Top    | F | 2 | BALUN TRANS                   | 900MHZ+/-100MHZ       | 1206               | TRANS_LDB20_25       |
| T740 | 4550139 | Top    | E | 3 | BALUN TRANS                   | 1.8GHZ+-100MHZ 1      | 1206               | TRANS_LDB20          |
| T800 | 3640423 | Top    | G | 2 | BALUN TRANS                   | 3.7GHZ+/-300MHZ       | 0805               | TRANS_LDB15          |
| V100 | 1825023 | Top    | Q | 6 | CHIP VARISTOR                 | VWM9V<br>VC20V        | 9V/20V/<br>0.1J    | 0805 SIOV            |
| V101 | 4210049 | Top    | M | 6 | Transistor                    | PDTC114EE N           |                    | EM3                  |
| V104 | 4113669 | Top    | O | 4 | ZDIX4 TVS/ESD                 | RSA6.1EN<br>6V1       | ~                  | SOT323_5L            |
| V116 | 4110441 | Top    | K | 3 | SCH DI                        | STPS0520Z<br>20V 0.5A | ~                  | CASE425_04<br>SOD123 |
| V201 | 4210049 | Top    | M | 1 | Transistor                    | PDTC114EE N           |                    | EM3                  |
| V202 | 4110089 | Top    | N | 1 | DIX2 BAV70W CC<br>70V .5A 4NS | ~                     | ~                  | SOT323               |
| V250 | 4210100 | Top    | M | 6 | Tr NPN 30V 100mA<br>100MHz    | ~                     | ~                  | SOT323               |
| V251 | 4210100 | Top    | N | 7 | Tr NPN 30V 100mA<br>100MHz    | ~                     | ~                  | SOT323               |

| Item | Code    | Side   | X | Y | Description                   | Type, data        |   |                    |
|------|---------|--------|---|---|-------------------------------|-------------------|---|--------------------|
| V252 | 4210049 | Top    | N | 6 | Transistor                    | PDTC114EE N       |   |                    |
| V278 | 4110089 | Top    | P | 3 | DIX2 BAV70W CC<br>70V .5A 4NS | ~                 | ~ | SOT323             |
| V321 | 4864521 | Bottom | J | 5 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_270W<br>BSO |
| V323 | 4864521 | Bottom | J | 7 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_270W<br>BSO |
| V325 | 4864521 | Bottom | J | 2 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_270W<br>BSO |
| V331 | 4864575 | Bottom | R | 6 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V332 | 4864575 | Bottom | O | 6 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V334 | 4864575 | Bottom | R | 3 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V335 | 4864575 | Bottom | O | 3 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V337 | 4864575 | Bottom | L | 6 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V338 | 4864575 | Bottom | L | 3 | LED                           | CL270WBJ<br>D     | ~ | LED_CL_191         |
| V350 | 4110089 | Top    | L | 2 | DIX2 BAV70W                   | CC 70V .5A<br>4NS | ~ | SOT323             |
| V360 | 4110089 | Top    | K | 2 | DIX2 BAV70W                   | CC 70V .5A<br>4NS | ~ | SOT323             |
| V730 | 4115881 | Top    | C | 5 | SCHDIX2                       | NSR15DW<br>1 <2PF | ~ | SOT343R_DN         |
| V800 | 4210100 | Top    | F | 6 | Tr NPN 30V 100mA<br>100MHz    | ~                 | ~ | SOT323             |
| V801 | 4210183 | Top    | D | 1 | TR BFP193W N<br>8GHZ F1.3-2.1 | ~                 | ~ | SOT343R            |
| V903 | 4210015 | Top    | D | 7 | TR NPN 15V 12mA<br>23GHz      | ~                 | ~ | SOT343_R           |
| V904 | 4210074 | Top    | C | 7 | TR N 4.5V 35mA<br>20GHz       | ~                 | ~ | SOT343_R           |
| V905 | 4210100 | Top    | F | 7 | Tr NPN 30V 100mA<br>100MHz    | ~                 | ~ | SOT323             |
| V907 | 4210100 | Top    | E | 7 | Tr NPN 30V 100mA<br>100MHz    | ~                 | ~ | SOT323             |

| Item | Code    | Side   | X | Y | Description   | Type, data                   |          |              |
|------|---------|--------|---|---|---------------|------------------------------|----------|--------------|
| X300 | 5409183 | Bottom | H | 5 | SM LCD CONN   | 1X8 P2.0 SPR 50V 0.5A<br>~   |          |              |
| Z600 | 4511093 | Top    | E | 6 | DUAL SAW FILT | 925-960/1805-1880MHZ         |          |              |
| Z620 | 4511093 | Top    | C | 6 | DUAL SAW FILT | 925-960/1805-1880MHZ         |          |              |
| Z670 | 4550201 | Top    | B | 6 | DIPL+2*SW     | 880-960/1710-1880MHZ 7X5     |          |              |
| Z671 | 4550067 | Top    | D | 2 | DIPLEXER_     | 880-960/1710-1880MHZ 3.2X2.5 |          |              |
| Z700 | 4511147 | Top    | E | 2 | FILTER_SAW_S  | 3DB 3X3                      | 897.5MHz | AFC902_H1.15 |