

CCS Technical Documentation

NHL-2NA Series Transceivers

Parts Lists

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RF/System Module LG4 Parts List

0201707 LG4 RF/Syst Module EDMS Issue 13.6

Table 1: 0201707 parts lis

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|---------------------------------|------------------|
| B190 | 4510303 | Top | Q | 8 | Crystal 32.768khz+-20ppm 12.5pf | Crystal_fc_255 |
| C100 | 2315203 | Top | M | 5 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C101 | 2315203 | Top | P | 5 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C102 | 2315203 | Top | M | 4 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C104 | 2315203 | Top | P | 2 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C105 | 2315203 | Top | M | 2 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C106 | 2315203 | Top | M | 3 | Chip Array X5r 2x10n M 16v | 0405_2_P0.65_AVX |
| C132 | 2312255 | Top | P | 9 | Chip cap X5r 10u K 10v | 1206C |
| C133 | 2312249 | Top | Q | 9 | Chip cap X5r 4u7 K 10v | 0805C |
| C134 | 2320491 | Top | M | 9 | Chip cap X7r 220n K 10v | 0603C |
| C135 | 2312255 | Top | M | 9 | Chip cap X5RChip cap 10u K 10v | 1206C |
| C136 | 2320544 | Top | C | 10 | Chip cap 5% NPO | 0402C |
| C137 | 2320544 | Top | Q | 10 | Chip cap 5% NPO | 0402C |
| C171 | 2320560 | Top | L | 4 | Chip cap 5% NPO | 0402C |
| C172 | 2320560 | Top | M | 5 | Chip cap 5% NPO | 0402C |
| C173 | 2320560 | Top | M | 5 | Chip cap 5% NPO | 0402C |
| C190 | 2320778 | Top | O | 8 | Chip cap X7R 10% 16V | 0402C |
| C191 | 2320481 | Top | O | 8 | Chip cap X5R 1u K 6v3 | 0603C |
| C193 | 2320481 | Top | P | 8 | Chip cap X5R 1u K 6v3 | 0603C |
| C194 | 2320481 | Top | M | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C195 | 2320805 | Top | N | 7 | Chip cap X5R 100N K 10V | 0402C |
| C197 | 2320481 | Top | P | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C198 | 2320481 | Top | O | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C199 | 2320481 | Top | Q | 5 | Chip cap X5R 1U K 6V3 | 0603C |
| C200 | 2320536 | Top | Q | 8 | Chip cap 5% NPO | 0402C |
| C201 | 2320536 | Top | Q | 8 | Chip cap 5% NPO | 0402C |
| C202 | 2320481 | Top | P | 8 | Chip cap X5R 1U K 6V3 | 0603C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|-------------------------|------------------|
| C203 | 2320481 | Top | P | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C204 | 2320481 | Top | P | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C205 | 2320481 | Top | Q | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C206 | 2320481 | Top | Q | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C207 | 2320481 | Top | Q | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C208 | 2320481 | Top | Q | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C213 | 2320546 | Top | Q | 6 | Chip cap 5% NPO | 0402C |
| C214 | 2320546 | Top | Q | 7 | Chip cap 5% NPO | 0402C |
| C215 | 2320546 | Top | Q | 7 | Chip cap 5% NPO | 0402C |
| C216 | 2320546 | Top | Q | 6 | Chip cap 5% NPO | 0402C |
| C217 | 2320546 | Top | Q | 7 | Chip cap 5% NPO | 0402C |
| C218 | 2320546 | Top | Q | 7 | Chip cap 5% NPO | 0402C |
| C219 | 2320805 | Top | P | 5 | Chip cap X5R 100N K 10V | 0402C |
| C221 | 2320481 | Top | Q | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C222 | 2320481 | Top | N | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C223 | 2320481 | Top | N | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C224 | 2320481 | Top | N | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C225 | 2320744 | Top | Q | 5 | Chip cap X7R 10% 50V | 0402C |
| C226 | 2320481 | Top | N | 5 | Chip cap X5R 1U K 6V3 | 0603C |
| C227 | 2320481 | Top | M | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C228 | 2320481 | Top | M | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C229 | 2320481 | Top | M | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C230 | 2320481 | Top | M | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C231 | 2320481 | Top | N | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C232 | 2320481 | Top | N | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C233 | 2320481 | Top | M | 6 | Chip cap X5R 1U K 6V3 | 0603C |
| C234 | 2320481 | Top | N | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C235 | 2320481 | Top | N | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C236 | 2320481 | Top | N | 7 | Chip cap X5R 1U K 6V3 | 0603C |
| C237 | 2320805 | Top | M | 6 | Chip cap X5R 100N K 10V | 0402C |
| C238 | 2315263 | Top | N | 8 | Chip cap | 0405_2_P0.65_AVX |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|-----------------------------|------------------|
| C239 | 2315205 | Top | Q | 6 | Chip cap | 0405_2_PO.65_AVX |
| C240 | 2315205 | Top | Q | 6 | Chip cap | 0405_2_PO.65_AVX |
| C241 | 2320805 | Top | P | 5 | Chip cap X5R 100N K 10V | 0402C |
| C242 | 2320805 | Top | M | 6 | Chip cap X5R 100N K 10V | 0402C |
| C260 | 2613009 | Top | T | 7 | Chip cap | TANT_TPSY |
| C261 | 2320778 | Top | R | 7 | Chip cap X7R 10% 16V | 0402C |
| C262 | 2310793 | Top | R | 7 | Chip cap X5R 2U2 K 10V | 0805C |
| C266 | 2310793 | Top | S | 5 | Chip cap X5R 2U2 K 10V | 0805C |
| C268 | 2310793 | Top | R | 7 | Chip cap X5R 2U2 K 10V | 0805C |
| C270 | 2310793 | Top | S | 5 | Chip cap X5R 2U2 K 10V | 0805C |
| C271 | 2320137 | Top | R | 6 | Chip cap X5R 470N K 10V | 0603C |
| C272 | 2320137 | Top | R | 6 | Chip cap X5R 470N K 10V | 0603C |
| C273 | 2320568 | Top | T | 5 | Chip cap 5% X7R | 0402C |
| C274 | 2320568 | Top | T | 5 | Chip cap 5% X7R | 0402C |
| C275 | 2320805 | Top | T | 5 | Chip cap X5R 100N K 10V | 0402C |
| C276 | 2312401 | Top | T | 5 | Chip cap X5R 1U0 10V | 0805C |
| C277 | 2320778 | Top | T | 5 | Chip cap X7R 10% 16V | 0402C |
| C278 | 2320744 | Top | T | 5 | Chip cap X7R 10% 50V | 0402C |
| C279 | 2312255 | Top | R | 6 | Chip cap X5R 10U K 10V 1206 | 1206C |
| C280 | 2320544 | Top | R | 6 | Chip cap 5% NPO | 0402C |
| C281 | 2320544 | Top | R | 6 | Chip cap 5% NPO | 0402C |
| C282 | 2320481 | Top | S | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C283 | 2320481 | Top | S | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C284 | 2320481 | Top | R | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C285 | 2320481 | Top | S | 8 | Chip cap X5R 1U K 6V3 | 0603C |
| C287 | 2320778 | Top | R | 7 | Chip cap X7R 10% 16V | 0402C |
| C300 | 2312401 | Top | N | 8 | Chip cap X5R 1U0 10V | 0805C |
| C301 | 2312401 | Top | M | 7 | Chip cap X5R 1U0 10V | 0805C |
| C302 | 2312255 | Top | M | 8 | Chip cap X5R 10U K 10V 1206 | 1206C |
| C303 | 2312255 | Top | T | 8 | Chip cap X5R 10U K 10V 1206 | 1206C |
| C304 | 2320805 | Top | T | 8 | Chip cap X5R 100N K 10V | 0402C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|-------------------------|------------------|
| C305 | 2610041 | Top | R | 5 | Chip cap | TANT_TPSY |
| C306 | 2610041 | Top | U | 5 | Chip cap | TANT_TPSY |
| C307 | 2320744 | Top | T | 8 | Chip cap X7R 10% 50V | 0402C |
| C308 | 2320778 | Top | S | 5 | Chip cap X7R 10% 16V | 0402C |
| C309 | 2320560 | Top | T | 5 | Chip cap 5% NPO | 0402C |
| C311 | 2315263 | Top | Q | 4 | Chip cap | 0405_2_P0.65_AVX |
| C312 | 2320779 | Top | S | 4 | Chip cap X7R 100N K 16V | 0603_BLM |
| C313 | 2315263 | Top | S | 4 | Chip cap | 0405_2_P0.65_AVX |
| C314 | 2320778 | Top | M | 1 | Chip cap X7R 10% 16V | 0402C |
| C315 | 2320778 | Top | P | 1 | Chip cap X7R 10% 16V | 0402C |
| C316 | 2315203 | Top | P | 2 | Chip cap | 0405_2_P0.65_AVX |
| C317 | 2315203 | Top | P | 2 | Chip cap | 0405_2_P0.65_AVX |
| C318 | 2320805 | Top | M | 2 | Chip cap X5R 100N K 10V | 0402C |
| C330 | 2320783 | Top | T | 4 | Chip cap X7R 33N K 10V | 0402C |
| C331 | 2320783 | Top | T | 4 | Chip cap X7R 33N K 10V | 0402C |
| C332 | 2320544 | Top | U | 4 | Chip cap 5% NPO | 0402C |
| C333 | 2312243 | Top | T | 4 | Chip cap X5R 4U7 K 6V3 | 0805C |
| C334 | 2320544 | Top | T | 4 | Chip cap 5% NPO | 0402C |
| C336 | 2320544 | Top | D | 4 | Chip cap 5% NPO | 0402C |
| C337 | 2320544 | Top | D | 4 | Chip cap 5% NPO | 0402C |
| C338 | 2320544 | Top | D | 4 | Chip cap 5% NPO | 0402C |
| C339 | 2320544 | Top | E | 6 | Chip cap 5% NPO | 0402C |
| C340 | 2320544 | Top | E | 7 | Chip cap 5% NPO | 0402C |
| C341 | 2320544 | Top | E | 7 | Chip cap 5% NPO | 0402C |
| C342 | 2320744 | Top | E | 4 | Chip cap X7R 10% 50V | 0402C |
| C343 | 2320744 | Top | E | 4 | Chip cap X7R 10% 50V | 0402C |
| C344 | 2320783 | Top | E | 3 | Chip cap X7R 33N K 10V | 0402C |
| C345 | 2320783 | Top | E | 3 | Chip cap X7R 33N K 10V | 0402C |
| C346 | 2320544 | Top | D | 3 | Chip cap 5% NPO | 0402C |
| C347 | 2320744 | Top | E | 3 | Chip cap X7R 10% 50V | 0402C |
| C348 | 2320744 | Top | E | 3 | Chip cap X7R 10% 50V | 0402C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|-----------------------------|------------|
| C349 | 2320560 | Top | E | 4 | Chip cap 5% NPO | 0402C |
| C350 | 2320544 | Top | E | 4 | Chip cap 5% NPO | 0402C |
| C353 | 2320778 | Top | E | 4 | Chip cap X7R 10% 16V | 0402C |
| C354 | 2312243 | Top | C | 1 | Chip cap X5R 4U7 K 6V3 | 0805C |
| C355 | 2320778 | Top | E | 3 | Chip cap X7R 10% 16V | 0402C |
| C356 | 2320778 | Top | E | 3 | Chip cap X7R 10% 16V | 0402C |
| C357 | 2320778 | Top | E | 3 | Chip cap X7R 10% 16V | 0402C |
| C360 | 2320805 | Top | E | 5 | Chip cap X5R 100N K 10V | 0402C |
| C361 | 2312255 | Top | E | 5 | Chip cap X5R 10U K 10V 1206 | 1206C |
| C362 | 2320544 | Top | E | 4 | Chip cap 5% NPO | 0402C |
| C363 | 2320137 | Top | E | 4 | Chip cap X5R 470N K 10V | 0603C |
| C380 | 2611745 | Top | U | 7 | Chip cap | TANT_TPSY |
| C381 | 2320805 | Top | M | 2 | Chip cap X5R 100N K 10V | 0402C |
| C382 | 2320536 | Top | L | 2 | Chip cap 5% NPO | 0402C |
| C383 | 2320544 | Top | U | 6 | Chip cap 5% NPO | 0402C |
| C430 | 2320805 | Top | L | 2 | Chip cap X5R 100N K 10V | 0402C |
| C431 | 2320481 | Top | E | 4 | Chip cap X5R 1U K 6V3 | 0603C |
| C450 | 2320544 | Top | M | 4 | Chip cap 5% NPO | 0402C |
| C451 | 2320544 | Top | L | 4 | Chip cap 5% NPO | 0402C |
| C452 | 2320544 | Top | M | 4 | Chip cap 5% NPO | 0402C |
| C470 | 2320805 | Top | D | 6 | Chip cap X5R 100N K 10V | 0402C |
| C501 | 2320548 | Top | G | 7 | Chip cap 5% NPO | 0402C |
| C502 | 2320536 | Top | H | 5 | Chip cap 5% NPO | 0402C |
| C503 | 2320546 | Top | H | 8 | Chip cap 5% NPO | 0402C |
| C510 | 2320481 | Top | K | 9 | Chip cap X5R 1U K 6V3 | 0603C |
| C511 | 2320481 | Top | K | 10 | Chip cap X5R 1U K 6V3 | 0603C |
| C512 | 2320481 | Top | K | 10 | Chip cap X5R 1U K 6V3 | 0603C |
| C513 | 2320481 | Top | K | 9 | Chip cap X5R 1U K 6V3 | 0603C |
| C522 | 2315019 | Top | J | 10 | Chip cap | 0612_H0.94 |
| C530 | 2320562 | Top | K | 10 | Chip cap 5% NPO | 0402C |
| C531 | 2320562 | Top | K | 9 | Chip cap 5% NPO | 0402C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|-------------------------|-------------|
| C532 | 2320783 | Top | K | 10 | Chip cap X7R 33N K 10V | 0402C |
| C533 | 2320783 | Top | K | 9 | Chip cap X7R 33N K 10V | 0402C |
| C534 | 2320778 | Top | K | 7 | Chip cap X7R 10% 16V | 0402C |
| C535 | 2320805 | Top | J | 7 | Chip cap X5R 100N K 10V | 0402C |
| C540 | 2320552 | Top | J | 7 | Chip cap 5% NPO | 0402C |
| C541 | 2320552 | Top | K | 7 | Chip cap 5% NPO | 0402C |
| C550 | 2320778 | Top | J | 7 | Chip cap X7R 10% 16V | 0402C |
| C551 | 2320536 | Top | J | 7 | Chip cap 5% NPO | 0402C |
| C557 | 2320554 | Top | I | 10 | Chip cap 5% NPO | 0402C |
| C558 | 2320778 | Top | J | 8 | Chip cap X7R 10% 16V | 0402C |
| C560 | 2320548 | Top | K | 9 | Chip cap 5% NPO | 0402C |
| C561 | 2320620 | Top | J | 7 | Chip cap X7R 5% 16V | 0402C |
| C562 | 2320805 | Top | J | 9 | Chip cap X5R 100N K 10V | 0402C |
| C581 | 2320633 | Top | L | 7 | Chip cap NPO 220P J 25V | 0402C |
| C582 | 2318011 | Top | K | 8 | Chip cap | 0805C_H1.35 |
| C583 | 2320564 | Top | L | 7 | Chip cap 5% NPO | 0402C |
| C584 | 2320520 | Top | L | 9 | Chip cap +-0.25pF NPO | 0402C |
| C586 | 2320554 | Top | L | 9 | Chip cap 5% NPO | 0402C |
| C591 | 2320560 | Top | K | 7 | Chip cap 5% NPO | 0402C |
| C592 | 2320779 | Top | L | 6 | Chip cap X7R 100N K 16V | 0603_BLM |
| C593 | 2320560 | Top | K | 7 | Chip cap 5% NPO | 0402C |
| C594 | 2320560 | Top | K | 6 | Chip cap 5% NPO | 0402C |
| C595 | 2320560 | Top | K | 5 | Chip cap 5% NPO | 0402C |
| C596 | 2320481 | Top | K | 9 | Chip cap X5R 1U K 6V3 | 0603C |
| C597 | 2320546 | Top | F | 9 | Chip cap 5% NPO | 0402C |
| C599 | 2320560 | Top | I | 9 | Chip cap 5% NPO | 0402C |
| C601 | 2320560 | Top | I | 10 | Chip cap 5% NPO | 0402C |
| C610 | 2320526 | Top | G | 9 | Chip cap +-0.25pF NPO | 0402C |
| C612 | 2320491 | Top | G | 10 | Chip cap X7R 220N K 10V | 0603C |
| C613 | 2320546 | Top | G | 9 | Chip cap 5% NPO | 0402C |
| C614 | 2320778 | Top | F | 10 | Chip cap X7R 10% 16V | 0402C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|-------------------------|------------|
| C630 | 2320560 | Top | I | 9 | Chip cap 5% NPO | 0402C |
| C631 | 2320560 | Top | I | 9 | Chip cap 5% NPO | 0402C |
| C632 | 2320560 | Top | G | 9 | Chip cap 5% NPO | 0402C |
| C640 | 2320508 | Top | G | 9 | Chip cap +-0.25pF NPO | 0402C |
| C641 | 2320536 | Top | G | 9 | Chip cap 5% NPO | 0402C |
| C642 | 2320805 | Top | G | 8 | Chip cap X5R 100N K 10V | 0402C |
| C643 | 2320552 | Top | G | 8 | Chip cap 5% NPO | 0402C |
| C662 | 2320536 | Top | L | 6 | Chip cap 5% NPO | 0402C |
| C670 | 2320548 | Top | E | 9 | Chip cap 5% NPO | 0402C |
| C671 | 2320548 | Top | G | 8 | Chip cap 5% NPO | 0402C |
| C711 | 2320540 | Top | G | 5 | Chip cap 5% NPO | 0402C |
| C712 | 2320778 | Top | F | 5 | Chip cap X7R 10% 16V | 0402C |
| C713 | 2320778 | Top | I | 5 | Chip cap X7R 10% 16V | 0402C |
| C714 | 2320546 | Top | I | 5 | Chip cap 5% NPO | 0402C |
| C715 | 2320548 | Top | I | 6 | Chip cap 5% NPO | 0402C |
| C720 | 2320778 | Top | H | 5 | Chip cap X7R 10% 16V | 0402C |
| C722 | 2320778 | Top | F | 5 | Chip cap X7R 10% 16V | 0402C |
| C731 | 2320546 | Top | F | 7 | Chip cap 5% NPO | 0402C |
| C733 | 2320548 | Top | E | 8 | Chip cap 5% NPO | 0402C |
| C751 | 2320620 | Top | H | 5 | Chip cap X7R 5% 16V | 0402C |
| C755 | 2320778 | Top | I | 7 | Chip cap X7R 10% 16V | 0402C |
| C757 | 2320778 | Top | G | 7 | Chip cap X7R 10% 16V | 0402C |
| C760 | 2320546 | Top | F | 6 | Chip cap 5% NPO | 0402C |
| C761 | 2320538 | Top | F | 7 | Chip cap 5% NPO | 0402C |
| C762 | 2320538 | Top | F | 6 | Chip cap 5% NPO | 0402C |
| C763 | 2320536 | Top | G | 7 | Chip cap 5% NPO | 0402C |
| C765 | 2320548 | Top | F | 5 | Chip cap 5% NPO | 0402C |
| C772 | 2312243 | Top | I | 6 | Chip cap X5R 4U7 K 6V3 | 0805C |
| C782 | 2611753 | Top | J | 5 | Chip cap | TANT_TPSW2 |
| C800 | 2320548 | Top | J | 7 | Chip cap 5% NPO | 0402C |
| C802 | 2322023 | Top | G | 8 | Chip cap NPO 2N2 J 16V | 0603C |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|---------------------------|----------------------------|
| C803 | 2320560 | Top | H | 8 | Chip cap 5% NPO | 0402C |
| C804 | 2320558 | Top | J | 6 | Chip cap 5% NPO | 0402C |
| C805 | 2320548 | Top | I | 7 | Chip cap 5% NPO | 0402C |
| C806 | 2320584 | Top | J | 8 | Chip cap 5% X7R | 0402C |
| C813 | 2320548 | Top | H | 7 | Chip cap 5% NPO | 0402C |
| C820 | 2320554 | Top | J | 7 | Chip cap 5% NPO | 0402C |
| C831 | 2320604 | Top | H | 7 | Chip cap 5% NPO | 0402C |
| C832 | 2320629 | Top | I | 8 | Chip cap NPO 1P0 B 50V | 0402C |
| C833 | 2320514 | Top | H | 8 | Chip cap +-0.25pF NPO | 0402C |
| C834 | 2320514 | Top | H | 8 | Chip cap +-0.25pF NPO | 0402C |
| D100 | 4370871 | Top | N | 4 | UPP_WD2-V2.2 F741973 | CSP_240 |
| D190 | 4370841 | Top | O | 6 | UEM V6.0 W-DOG ENA T009 | uBGA168 |
| D310 | 4340831 | Top | Q | 3 | IC | uBGA40_P0.5_10.0 X7.0 |
| D311 | 4341343 | Top | S | 3 | IC | uBGA40_WC128_1 2.6X12.1 |
| D312 | 4341341 | Top | N | 2 | IC | uBGA52_H1.1 |
| G190 | 4700129 | Top | L | 3 | Batt | ML414R_TT30 |
| G591 | 4510349 | Top | L | 7 | VCTCX0_ | KT20 |
| G650 | 4350243 | Top | L | 8 | VCO_GK | _601MNA_2 |
| L130 | 3203723 | Top | Q | 10 | Ferrite | BK1608 |
| L131 | 3640123 | Top | N | 9 | DO1605T | 103 |
| L132 | 3203723 | Top | M | 10 | Ferrite | BK1608 |
| L260 | 3640117 | Top | U | 8 | NP05DB220M | NP05DB220M |
| L300 | 3203701 | Top | T | 8 | Ferrite | 0805 |
| L301 | 3203801 | Top | D | 4 | Coil | 0405_2_MATSU |
| L302 | 3203801 | Top | D | 3 | Coil | 0405_2_MATSU |
| L430 | 3203701 | Top | E | 4 | Ferrite | 0805 |
| L431 | 3203701 | Top | E | 2 | Ferrite | 0805 |
| L432 | 3646083 | Top | E | 5 | Chip coil 100N J Q16/300M | 0402L |
| L566 | 3646085 | Top | E | 9 | Chip coil 6N8 K Q29/800M | 0402L |
| L567 | 3646065 | Top | F | 9 | Chip coil 12N J Q31/800M | 0402L |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|------------------------------|-------------------------------|
| L600 | 3646067 | Top | I | 9 | Chip coil 18N J Q29/800M | 0402L |
| L610 | 3646013 | Top | F | 10 | Coil | 0402_ELJRF |
| L630 | 3646091 | Top | I | 9 | Chip coil 6N8 J Q27/800M | 0402L |
| L640 | 3646051 | Top | G | 8 | Chip coil 3N9 +-0N3 Q28/800M | 0402L |
| L672 | 3646007 | Top | E | 8 | Chip coil 27N J Q27/800M | 0402L |
| L704 | 3646039 | Top | F | 5 | Coil | 0402_ELJRF |
| L705 | 3645065 | Top | F | 6 | Chip coil 5N6 K Q98/1.5GHZ | 0805HQ |
| L708 | 3203715 | Top | F | 5 | Ferrite | Ferrite_BK1005 |
| L749 | 4551015 | Top | G | 7 | COUPLER | COUPLER_LDC15D |
| L751 | 3203705 | Top | I | 5 | Ferrite | 0805_ Ferrite |
| L820 | 3646015 | Top | I | 7 | ELJRF | 0402_ELJRF |
| L821 | 3646015 | Top | J | 7 | ELJRF | 0402_ELJRF |
| L830 | 3646051 | Top | I | 8 | Chip coil 3N9 +-0N3 Q28/800M | 0402L |
| N130 | 4341353 | Top | O | 9 | CSP_8 | TEA1207UK DC/DC CONV 2.9-5.5V |
| N260 | 4370861 | Top | S | 6 | IC | uBGA80_H1.23 |
| N380 | 4341087 | Top | M | 2 | IC | TSOP_6_H1.1 |
| N430 | 4350289 | Top | I | 3 | IC | BT102_X_BLUET00 TH |
| N505 | 4370781 | Top | J | 8 | IC | uBGA80_H1.7 |
| N701 | 4350297 | Top | G | 6 | IC | RF_AMP_RF9203_E 5_H1.65 |
| R100 | 1430726 | Top | P | 5 | Resistor 5% 63mW | 0402R |
| R101 | 1430726 | Top | P | 5 | Resistor 5% 63mW | 0402R |
| R102 | 1430786 | Top | P | 5 | Resistor 5% 63mW | 0402R |
| R130 | 1430762 | Top | C | 10 | Resistor 5% 63mW | 0402R |
| R131 | 1430788 | Top | E | 10 | Resistor 5% 63mW | 0402R |
| R132 | 1820037 | Top | E | 10 | NTC RES 47K B=4050+-3% | 0603_BLM |
| R133 | 1430754 | Top | P | 4 | Resistor 5% 63mW | 0402R |
| R134 | 1430778 | Top | L | 4 | Resistor 5% 63mW | 0402R |
| R135 | 1430778 | Top | L | 4 | Resistor 5% 63mW | 0402R |
| R136 | 1430744 | Top | Q | 9 | Resistor 5% 63mW | 0402R |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|----------------------------|------------|
| R137 | 1430861 | Top | Q | 9 | Resistor 0W06 110K F | 0402R |
| R138 | 1430794 | Top | Q | 9 | Resistor 5% 63mW | 0402R |
| R141 | 1430756 | Top | P | 4 | Resistor 5% 63mW | 0402R |
| R171 | 1430726 | Top | L | 4 | Resistor 5% 63mW | 0402R |
| R172 | 1430778 | Top | M | 5 | Resistor 5% 63mW | 0402R |
| R173 | 1430778 | Top | M | 5 | Resistor 5% 63mW | 0402R |
| R190 | 1419003 | Top | O | 8 | Resistor 0W5 0R22 J | 1210_R |
| R191 | 1430804 | Top | Q | 5 | Resistor 5% 63mW | 0402R |
| R192 | 1430812 | Top | M | 7 | Resistor 5% 63mW | 0402R |
| R193 | 1430804 | Top | Q | 5 | Resistor 5% 63mW | 0402R |
| R194 | 1430790 | Top | M | 5 | Resistor 5% 63mW | 0402R |
| R262 | 1430718 | Top | T | 5 | Resistor 5% 63mW | 0402R |
| R300 | 1413850 | Top | S | 5 | Resistor 0W125 4R7 J | 0805R |
| R301 | 1413850 | Top | S | 4 | Resistor 0W125 4R7 J | 0805R |
| R311 | 1430778 | Top | P | 4 | Resistor 5% 63mW | 0402R |
| R313 | 1430778 | Top | Q | 4 | Resistor 5% 63mW | 0402R |
| R314 | 1430770 | Top | P | 4 | Resistor 5% 63mW | 0402R |
| R330 | 1430137 | Top | U | 4 | Resistor 0W06 1K0 F 200PPM | 0402R |
| R331 | 1430137 | Top | U | 4 | Resistor 0W06 1K0 F 200PPM | 0402R |
| R332 | 1825033 | Top | U | 4 | Chip varistor VW14V VC46V | 0402_VAR |
| R333 | 1825033 | Top | U | 4 | Chip varistor VW14V VC46V | 0402_VAR |
| R334 | 1825033 | Top | D | 4 | Chip varistor VW14V VC46V | 0402_VAR |
| R335 | 1825033 | Top | D | 4 | Chip varistor VW14V VC46V | 0402_VAR |
| R336 | 1825033 | Top | E | 6 | Chip varistor VW14V VC46V | 0402_VAR |
| R337 | 1825033 | Top | E | 7 | Chip varistor VW14V VC46V | 0402_VAR |
| R338 | 1430137 | Top | E | 3 | Resistor 0W06 1K0 F 200PPM | 0402R |
| R339 | 1430762 | Top | E | 3 | Resistor 5% 63mW | 0402R |
| R340 | 1430762 | Top | E | 3 | Resistor 5% 63mW | 0402R |
| R341 | 1430137 | Top | E | 2 | Resistor 0W06 1K0 F 200PPM | 0402R |
| R342 | 1825033 | Top | D | 4 | Chip varistor VW14V VC46V | 0402_VAR |
| R343 | 1825033 | Top | D | 4 | Chip varistor VW14V VC46V | 0402_VAR |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|---|--------------------------------|------------|
| R344 | 1825033 | Top | E | 3 | Chip varistor VW14V VC46V | 0402_VAR |
| R345 | 1825033 | Top | E | 3 | Chip varistor VW14V VC46V | 0402_VAR |
| R346 | 1825033 | Top | D | 3 | Chip varistor VW14V VC46V | 0402_VAR |
| R347 | 1430681 | Top | S | 5 | Resistor 0W06 4R3 J | 0402R |
| R348 | 1430137 | Top | E | 3 | Resistor 0W06 1K0 F 200PPM | 0402R |
| R349 | 1620103 | Top | E | 4 | Resistor | 0404_R_SR |
| R350 | 1430718 | Top | E | 3 | Resistor 5% 63mW | 0402R |
| R352 | 1430718 | Top | E | 3 | Resistor 5% 63mW | 0402R |
| R353 | 1430734 | Top | T | 4 | Resistor 5% 63mW | 0402R |
| R360 | 1430693 | Top | E | 4 | Chipres 0W06 5R6 J | 0402R |
| R361 | 1430693 | Top | E | 4 | Chipres 0W06 5R6 J | 0402R |
| R362 | 1430693 | Top | E | 5 | Chipres 0W06 5R6 J | 0402R |
| R363 | 1430693 | Top | E | 5 | Chipres 0W06 5R6 J | 0402R |
| R380 | 1825033 | Top | U | 5 | Chip varistor VW14V VC46V | 0402_VAR |
| R382 | 1825033 | Top | U | 5 | Chip varistor VW14V VC46V | 0402_VAR |
| R383 | 1430804 | Top | T | 9 | Resistor 5% 63mW | 0402R |
| R384 | 1430804 | Top | T | 9 | Resistor 5% 63mW | 0402R |
| R470 | 4120071 | Top | E | 6 | ASIP EMIF03-SIM01 SIM FILTER | uBGA8 |
| R471 | 1430786 | Top | E | 6 | Resistor 5% 63mW | 0402R |
| R510 | 1620081 | Top | K | 9 | Res. network 0W03 4X22R J 0804 | MNR04 |
| R532 | 1430846 | Top | I | 8 | Resistor 1% 63mW | 0402R |
| R533 | 1430770 | Top | K | 7 | Resistor 5% 63mW | 0402R |
| R534 | 1430770 | Top | J | 7 | Resistor 5% 63mW | 0402R |
| R541 | 1620033 | Top | K | 6 | Res. network 0W06 2X5K6 J | 0404_R |
| R550 | 1620033 | Top | J | 6 | Res. network 0W06 2X5K6 J | 0404_R |
| R551 | 1430700 | Top | J | 7 | Resistor 5% 63mW | 0402R |
| R580 | 1430865 | Top | K | 7 | Resistor 0W06 5K6 F | 0402R |
| R581 | 1430841 | Top | L | 7 | Resistor 0W06 6k8 F | 0402R |
| R582 | 1430700 | Top | L | 9 | Resistor 5% 63mW | 0402R |
| R591 | 1430778 | Top | K | 6 | Resistor 5% 63mW | 0402R |
| R592 | 1430774 | Top | L | 6 | Resistor 5% 63mW | 0402R |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|------|---|----|----------------------------|--------------|
| R593 | 1430746 | Top | K | 5 | Resistor 5% 63mW | 0402R |
| R594 | 1430712 | Top | L | 5 | Resistor 5% 63mW | 0402R |
| R595 | 1430734 | Top | K | 5 | Resistor 5% 63mW | 0402R |
| R596 | 1430762 | Top | K | 7 | Resistor 5% 63mW | 0402R |
| R610 | 1430726 | Top | G | 10 | Resistor 5% 63mW | 0402R |
| R612 | 1430700 | Top | G | 10 | Resistor 5% 63mW | 0402R |
| R616 | 1430832 | Top | F | 10 | Resistor 5% 63mW | 0402R |
| R642 | 1430700 | Top | G | 8 | Resistor 5% 63mW | 0402R |
| R643 | 1430740 | Top | G | 8 | Resistor 5% 63mW | 0402R |
| R646 | 1430832 | Top | G | 9 | Resistor 5% 63mW | 0402R |
| R670 | 1430700 | Top | E | 8 | Resistor 5% 63mW | 0402R |
| R730 | 1430718 | Top | G | 7 | Resistor 5% 63mW | 0402R |
| R745 | 1430714 | Top | I | 7 | Resistor 5% 63mW | 0402R |
| R746 | 1430718 | Top | I | 8 | Resistor 5% 63mW | 0402R |
| R747 | 1430734 | Top | G | 7 | Resistor 5% 63mW | 0402R |
| R763 | 1430726 | Top | F | 6 | Resistor 5% 63mW | 0402R |
| R764 | 1430770 | Top | F | 7 | Resistor 5% 63mW | 0402R |
| R800 | 1430770 | Top | G | 7 | Resistor 5% 63mW | 0402R |
| R801 | 1430788 | Top | H | 8 | Resistor 5% 63mW | 0402R |
| R802 | 1430784 | Top | J | 6 | Resistor 5% 63mW | 0402R |
| R803 | 1430778 | Top | G | 8 | Resistor 5% 63mW | 0402R |
| R804 | 1430770 | Top | H | 8 | Resistor 5% 63mW | 0402R |
| R820 | 1620121 | Top | J | 7 | Res. network 0W06 2X220R J | MNR02_SR0404 |
| R821 | 1620515 | Top | J | 6 | Resistor | 0404_RAC10 |
| R822 | 1430693 | Top | I | 7 | Chipres 0W06 5R6 J | 0402R |
| R823 | 1430693 | Top | J | 7 | Chipres 0W06 5R6 J | 0402R |
| R830 | 1620121 | Top | H | 8 | Res. network 0W06 2X220R J | MNR02_SR |
| R831 | 1620515 | Top | I | 7 | Resistor | 0404_RAC10 |
| S130 | 520D001 | Top | C | 10 | AGK_3233 | 42VDC 100MA |
| T580 | 3640423 | Top | K | 8 | Transistor | LDB15 |
| T830 | 4550137 | Top | H | 8 | Transistor | LDB15 |

| Item | Code | Side | X | Y | Component Name | Type, vaue |
|------|---------|-------------|---|----|-------------------------------------|------------------|
| V130 | 4864901 | Top | D | 9 | TR PHOTO SFH3410 | SFH2400 |
| V132 | 4110451 | Top | P | 10 | SCH DI MBRM120L 20V 1A | DO_216AA |
| V334 | 4860009 | Top | C | 2 | LED | LED_CL200 |
| V335 | 4864911 | Top | D | 2 | DI PHOTO 950NM 20NS | BPW34 |
| V360 | 4860101 | Top | B | 5 | IRDA 9.K6-1M152 | TFDU5102 |
| V590 | 4210066 | Top | K | 5 | Tr NPN 12V 35mA SOT323 | SOT323 |
| V610 | 4210277 | Top | F | 9 | TR BGB420 | SOT343_R |
| V640 | 4210261 | Top | G | 9 | TR BGA428 LNA1.8GHZ 19.5DB | SOT_363 |
| V760 | 4110079 | Top | F | 7 | SCH DIX2 HSMS282C 15V <1PF | SOT323 |
| X130 | 5469167 | Top | S | 10 | Conn | DF12B_2X15F |
| X330 | 5409119 | Top | B | 3 | Jack | T_285332 |
| X331 | 5409227 | Top | C | 5 | Earpiece Adapter | DMD07692 |
| X380 | 9855053 | Bot- tom | V | 6 | FLEX L4 75.2X31.7 S | FPC_2400 |
| Z130 | 4120035 | Top | S | 8 | ASIP EMI/ESD10CH | IP4041CX25 BGA25 |
| Z131 | 4120035 | Top | R | 8 | ASIP EMI/ESD10CH | IP4041CX25 BGA25 |
| Z300 | 3640011 | Top | N | 8 | EMI FILT Z>600R/100M OR6MAX 0.2A | 0805_BLM |
| Z301 | 3640011 | Top | M | 7 | EMI FILT Z>600R/100M OR6MAX 0.2A | 0805_BLM |
| Z302 | 3203751 | Top | M | 8 | Ferrite | FBMH |
| Z330 | 3203725 | Top | D | 4 | Ferrite | 0402 |
| Z331 | 3203725 | Top | D | 4 | Ferrite | 0402 |
| Z332 | 3203725 | Top | D | 3 | Ferrite_ | 0402 |
| Z333 | 3203725 | Top | D | 3 | Ferrite | 0402 |
| Z383 | 4120035 | Top | T | 8 | ASIP EMI/ESD10CH | IP4041CX25 BGA25 |
| Z384 | 4120035 | Top | U | 5 | ASIP EMI/ESD10CH | IP4041CX25 BGA25 |
| Z600 | 4511235 | Top | H | 9 | DCC6D | H1.15 |
| Z672 | 4550205 | Top | F | 8 | ANT_SW | LMZ0135_6A3 |
| Z800 | 4511237 | Top | J | 6 | DCC6D | H1.15 |
| Z802 | 4511241 | Top | H | 9 | DCC6D | H1.15 |

Grip Module LS4 Parts List

0201711 LS4 RF/Syst Module EDMS Issue: 6.0

Table 2: 0201711 parts list

| Item | Code | Part name | Part value |
|------|---------|--------------------------|------------|
| R006 | 1825033 | Chip varistor vwm14v vc4 | VC4 |
| R007 | 1825033 | Chip varistor vwm14v vc4 | VC4 |
| R008 | 1825033 | Chip varistor vwm14v vc4 | VC4 |
| R011 | 1430754 | chipres 0w06 1k0 j | |
| R012 | 1430804 | chipres 0w06 100k j | |
| R013 | 1430427 | chipres 0w06 37r4 f 100p | 100P |
| R014 | 1430427 | chipres 0w06 37r4 f 100p | 100P |
| C002 | 2320546 | Chip cap np0 27p j 50v | |
| C003 | 2310793 | Chip cap x5r 2u2 k 10v | |
| C004 | 2320783 | Chip cap x7r 33n k 10v | |
| C005 | 2320546 | Chip cap np0 27p j 50v | |
| C006 | 2312203 | Chip cap y5v 1u z 50v | |
| C007 | 2320805 | Chip cap x5r 100n k 10v | |
| C008 | 2320805 | Chip cap x5r 100n k 10v | |
| C010 | 2320546 | Chip cap np0 27p j 50v | |
| C011 | 2320744 | Chip cap x7r 1n0 k 50v | |
| C012 | 2360001 | Chip cap x5r 330n k 10v | |
| C013 | 2312243 | Chip cap x5r 4u7 k 6v3 | |
| C014 | 2360001 | Chip cap x5r 330n k 10v | |
| C015 | 2320481 | Chip cap x5r 1u k 6v3 | |
| C018 | 2310037 | Chip cap x5r 10u m 6v3 | |
| L001 | 3203701 | Ferrite bead 33r/100mhz | 33R/100MHZ |
| F001 | 5119019 | sm fuse f 1.5a 32v | 0603 |
| V001 | 4860331 | led lwl88s white >3,4v i | I |
| V002 | 4860331 | led lwl88s white >3,4v i | I |
| V003 | 4860331 | led lwl88s white >3,4v i | I |
| V004 | 4860331 | led lwl88s white >3,4v i | I |
| V005 | 4860331 | led lwl88s white >3,4v i | I |
| V006 | 4860331 | led lwl88s white >3,4v i | I |

| Item | Code | Part name | Part value |
|------|---------|--------------------------|------------------|
| V009 | 4113721 | tv5 di 1pmt16at3 16v 175 | 175 |
| V012 | 4110089 | dix2 bav70w cc 70v .5a 4 | 4 |
| V013 | 4860331 | led lwl88s white >3,4v i | I |
| V014 | 4860331 | led lwl88s white >3,4v i | I |
| V016 | 4110089 | dix2 bav70w cc 70v .5a 4 | 4 |
| N001 | 4341165 | current sense(lm3822mmx- | SENSE(LM3822MMX- |
| N320 | 4341137 | dc/dc conv 4.1v/80ma(lm3 | 4.1V/80MA(LM3 |
| X001 | 5460059 | sm conn 2x25m p0.5 50v.5 | 50V.5 |
| X004 | 5400247 | sm conn vibra spacer pad | PAD |
| X005 | 5400247 | sm conn vibra spacer pad | PAD |
| X006 | 5400245 | sm conn dc-jack spacer p | P |
| X007 | 5400245 | sm conn dc-jack spacer p | P |
| X008 | 5400245 | sm conn dc-jack spacer p | P |
| I052 | 9854561 | pwb ls4_18 60.0x45.6x0.6 | 60.0x45.6x0.6 |