

```

*****
80637 Sat Feb 7 18:57:40 2015
new/usr/src/lib/libdisasm/common/dis_arm.c
libdisasm: disassembly of strex may cause SIGSEGV
To make things confusing enough, the names of bitfields between ldrex and
strex are not totally consistent so this commit makes it easier on future
readers.
*****
_____unchanged_portion_omitted_____

1272 /*
1273  * Handle LDREX and STREX out of the extra loads/stores extensions.
1274  */
1275 static int
1276 arm_dis_lsexcl(uint32_t in, char *buf, size_t buflen)
1277 {
1278     arm_cond_code_t cc;
1279     arm_reg_t rx, ry, rz;
1279     arm_reg_t rn, rd, rm;
1280     int lbit;
1281     size_t len;

1283     /*
1284      * To make things confusing enough, the names of bitfields between
1285      * ldrex and strex are not totally consistent. Specifically,
1286      * STREX rd, rt, [rn]
1287      *     rn = 19:16
1288      *     rd = 15:12
1289      *     rt = 3:0
1290      *
1291      * LDREX rt, [rn]
1292      *     rn = 19:16
1293      *     rt = 15:12
1294      *
1295      * To avoid having to do too many mental gymnastics, let's just
1296      * think of the bitfields as:
1297      *
1298      *     rx = 19:16
1299      *     ry = 15:12
1300      *     rz = 3:0
1301      *
1302      * And so we print the instructions as:
1303      * STREX ry, rz, [rx]
1304      * LDREX ry, [rx]
1305      */

1307 #endif /* ! codereview */
1308     cc = (in & ARM_CC_MASK) >> ARM_CC_SHIFT;
1309     rx = (in & ARM_ELS_RN_MASK) >> ARM_ELS_RN_SHIFT;
1310     ry = (in & ARM_ELS_RD_MASK) >> ARM_ELS_RD_SHIFT;
1311     rz = (in & ARM_ELS_LOW_AM_MASK);
1283     rn = (in & ARM_ELS_RN_MASK) >> ARM_ELS_RN_SHIFT;
1284     rd = (in & ARM_ELS_RD_MASK) >> ARM_ELS_RD_SHIFT;
1285     rm = in & ARM_ELS_RN_MASK;
1312     lbit = in & ARM_ELS_LBIT_MASK;

1314     len = snprintf(buf, buflen, "%s%sex %s, ",
1315                  lbit != 0 ? "ldr" : "str",
1316                  arm_cond_names[cc], arm_reg_names[ry]);
1290     arm_cond_names[cc], arm_reg_names[rd]);
1317     if (len >= buflen)
1318         return (-1);

1320     if (lbit)
1321         len += snprintf(buf + len, buflen - len, "[%s]",
1322                        arm_reg_names[rx]);

```

```

1296         arm_reg_names[rn]);
1323     else
1324         len += snprintf(buf + len, buflen - len, "%s, [%s]",
1325                        arm_reg_names[rz], arm_reg_names[rx]);
1299     arm_reg_names[rm], arm_reg_names[rn]);
1326     return (len >= buflen ? -1 : 0);
1327 }
_____unchanged_portion_omitted_____

```