

REX Dispatcher Function

rex_dispatcher_func:

```
// save the callee-saved registers
pushq ...
// save rsp and rbp
movq %rsp, PER_CPU_VAR(iu_old_sp) ...
// switch stack
movq PER_CPU_VAR(iu_stack_ptr), %rsp ...
// invoke REX user program
call *%rdx
```

rex_exit:

```
// reset rsp and rbp based on saved value
movq PER_CPU_VAR(iu_old_sp), %rsp
movq PER_CPU_VAR(iu_old_fp), %rbp

// restore the callee-saved registers
popq ...
```

REX User Program

rex_prog1:

```
...
ret
```



Panic Handler

```
rex_landingpad:
// report error
// set return value to zero
...
jmp rex_exit
```