```
Last login: Mon Jul 21 13:43:13 on ttys008
/Users/andrebaker/Desktop/
chat_llama.command; exit;
andrebaker@Andres-MacBook-Pro ~ % /
Users/andrebaker/Desktop/
chat_llama.command; exit;
LLaMA server started (PID: 14586)
Launching Jarvis voice chat...
build: 5948 (b4efd77f) with Apple clang
version 17.0.0 (clang-1700.0.13.5) for
arm64-apple-darwin24.5.0
system info: n_threads = 6, n_threads_batch
= 6, total_threads = 10
system_info: n_threads = 6
(n_threads_batch = 6) / 10 | Metal :
EMBED_LIBRARY = 1 | CPU : NEON = 1 |
ARM_FMA = 1 | FP16_VA = 1 | DOTPROD = 1 |
LLAMAFILE = 1 | ACCELERATE = 1 | REPACK
= 11
```

main: binding port with default address family

main: HTTP server is listening, hostname:

127.0.0.1, port: 8080, http threads: 9

main: loading model

```
srv load_model: loading model 'models/
meta-llama-3-8b-instruct.Q4_K_M.gguf'
llama_model_load_from_file_impl: using
device Metal (Apple M1 Pro) - 10922 MiB
free
llama_model_loader: loaded meta data with
21 key-value pairs and 291 tensors from
models/meta-llama-3-8b-
instruct.Q4_K_M.gguf (version GGUF V3
(latest))
Ilama_model_loader: Dumping metadata
keys/values. Note: KV overrides do not apply
in this output.
llama_model_loader: - kv 0:
general.architecture str = Ilama
llama_model_loader: - kv 1:
general.name str = Meta-Llama-3-8B-
Instruct
llama_model_loader: - kv 2:
llama.block_count u32
                            = 32
llama_model_loader: - kv 3:
                              = 8192
llama.context_length u32
llama_model_loader: - kv 4:
llama.embedding_length u32
                                  = 4096
llama model loader: - kv 5:
```

```
llama.feed_forward_length u32
14336
llama_model_loader: - kv 6:
llama.attention.head_count u32
                                    = 32
llama_model_loader: - kv 7:
llama.attention.head_count_kv u32
8
llama_model_loader: - kv 8:
llama.rope.freq_base f32
500000.000000
llama_model_loader: - kv 9:
llama.attention.layer_norm_rms_epsilon f32
= 0.000010
llama model loader: - kv 10:
general.file_type u32 = 15
llama_model_loader: - kv 11:
llama.vocab_size u32 = 128256
llama_model_loader: - kv 12:
llama.rope.dimension_count u32
128
llama_model_loader: - kv 13:
tokenizer.ggml.model str = gpt2
llama_model_loader: - kv 14:
tokenizer.ggml.tokens arr[str,128256] = ["!",
"\"", "#", "$", "%", "&", "'", ...
```

```
llama model loader: - kv 15:
tokenizer.ggml.token_type arr[i32,128256] =
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, ...
llama_model_loader: - kv 16:
tokenizer.ggml.merges arr[str,280147] = ["Ġ
Ġ", "Ġ ĠĠĠ", "ĠĠ ĠĠ", "....
llama_model_loader: - kv 17:
tokenizer.ggml.bos_token_id u32
128000
llama model loader: - kv 18:
tokenizer.ggml.eos_token_id u32
128001
llama model loader: - kv 19:
tokenizer.chat_template str
                                  = {% set
loop_messages = messages %}{% xxx
llama_model_loader: - kv 20:
general.quantization_version u32
                                        = 2
llama_model_loader: - type f32: 65 tensors
llama_model_loader: - type q4_K: 193
tensors
llama_model_loader: - type q6_K: 33
tensors
print_info: file format = GGUF V3 (latest)
print_info: file type = Q4_K - Medium
print_info: file size = 4.58 GiB (4.89 BPW)
```

```
load: missing pre-tokenizer type, using:
'default'
load:
load: ************************
load: GENERATION QUALITY WILL BE
DEGRADED!
load: CONSIDER REGENERATING THE
MODEL
load: *****************************
load:
load: special tokens cache size = 256
load: token to piece cache size = 0.8000 MB
print_info: arch = Ilama
print_info: vocab_only = 0
print_info: n_ctx_train = 8192
print_info: n_embd = 4096
print_info: n_layer = 32
print_info: n_head = 32
print_info: n_head_kv = 8
print_info: n_rot = 128
print_info: n_swa = 0
print_info: is_swa_any = 0
print_info: n_embd_head_k = 128
print_info: n_embd_head_v = 128
print_info: n_gqa
```

```
print_info: n_embd_k_gqa = 1024
print_info: n_embd_v_gqa = 1024
print_info: f_norm_eps = 0.0e+00
print_info: f_norm_rms_eps = 1.0e-05
print_info: f_clamp_kqv = 0.0e+00
print_info: f_max_alibi_bias = 0.0e+00
print_info: f_logit_scale = 0.0e+00
print_info: f_attn_scale = 0.0e+00
print_info: n_ff = 14336
print_info: n_expert = 0
print_info: n_expert_used = 0
print_info: causal attn = 1
print_info: pooling type = 0
print_info: rope type = 0
print_info: rope scaling = linear
print_info: freq_base_train = 500000.0
print_info: freq_scale_train = 1
print_info: n_ctx_orig_yarn = 8192
print_info: rope_finetuned = unknown
print_info: model type = 8B
print_info: model params = 8.03 B
print_info: general.name = Meta-
Llama-3-8B-Instruct
print_info: vocab type = BPE
print_info: n_vocab = 128256
```

print_info: n_merges = 280147

print_info: BOS token = 128000 '<|

begin_of_text|>'

print_info: EOS token = 128001 '<|

end_of_text|>'

print_info: EOT token = 128009 '<|eot_id|

>'

print_info: LF token = 198 'C'

print_info: EOG token = 128001 '<|

end_of_text|>'

print_info: EOG token = 128009 '<|

eot_id|>'

print_info: max token length = 256

load_tensors: loading model tensors, this can

take a while... (mmap = true)

load_tensors: offloading 32 repeating layers

to GPU

load_tensors: offloading output layer to GPU

load_tensors: offloaded 33/33 layers to GPU

load_tensors: Metal_Mapped model buffer

size = 4403.50 MiB

load_tensors: CPU_Mapped model buffer

size = 281.81 MiB

.....

```
llama_context: constructing llama_context
llama_context: non-unified KV cache requires
ggml_set_rows() - forcing unified KV cache
llama_context: n_seq_max = 1
Ilama_context: n_ctx = 4096
llama_context: n_ctx_per_seq = 4096
llama_context: n_batch = 2048
llama_context: n_ubatch = 512
llama_context: causal_attn = 1
llama_context: flash_attn = 0
llama_context: kv_unified = true
llama_context: freq_base = 500000.0
llama_context: freq_scale = 1
llama_context: n_ctx_per_seq (4096) <</pre>
n_ctx_train (8192) -- the full capacity of the
model will not be utilized
ggml_metal_init: allocating
ggml_metal_init: found device: Apple M1 Pro
ggml_metal_init: picking default device:
Apple M1 Pro
ggml_metal_load_library: using embedded
metal library
ggml_metal_init: GPU name: Apple M1 Pro
ggml_metal_init: GPU family:
MTLGPUFamilyApple7 (1007)
```

```
ggml_metal_init: GPU family:
MTLGPUFamilyCommon3 (3003)
ggml_metal_init: GPU family:
MTLGPUFamilyMetal3 (5001)
ggml_metal_init: simdgroup reduction = true
ggml_metal_init: simdgroup matrix mul. =
true
ggml_metal_init: has residency sets = true
ggml_metal_init: has bfloat = true
ggml_metal_init: use bfloat = false
ggml_metal_init: hasUnifiedMemory = true
ggml_metal_init:
recommendedMaxWorkingSetSize =
11453.25 MB
ggml_metal_init: skipping
kernel_get_rows_bf16
                               (not
supported)
ggml_metal_init: skipping
kernel_set_rows_bf16
                               (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32
                                 (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_c4
                                   (not
```

```
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_1row
                                     (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_l4
                                    (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_bf16
                                   (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_id_bf16_f32
                                   (not
supported)
ggml_metal_init: skipping
kernel_mul_mm_bf16_f32
                                   (not
supported)
ggml_metal_init: skipping
kernel_mul_mm_id_bf16_f16
                                    (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h64
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h80
                                     (not
supported)
```

```
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h96
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h112
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h128
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h192
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_hk192_hv128
(not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h256
                                      (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_hk576_hv512
(not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h64
                                        (not
supported)
ggml_metal_init: skipping
```

```
kernel_flash_attn_ext_vec_bf16_h96
                                        (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h128
(not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h192
(not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_hk192_hv1
28 (not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h256
(not supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_hk576_hv5
12 (not supported)
ggml_metal_init: skipping
kernel_cpy_f32_bf16
                               (not
supported)
ggml_metal_init: skipping
kernel_cpy_bf16_f32
                               (not
supported)
ggml_metal_init: skipping
kernel_cpy_bf16_bf16
                                (not
```

```
supported)
llama_context:
                 CPU output buffer size =
0.49 MiB
llama_kv_cache_unified: Metal KV buffer
size = 512.00 MiB
llama_kv_cache_unified: size = 512.00 MiB
( 4096 cells, 32 layers, 1/1 seqs), K (f16):
256.00 MiB, V (f16): 256.00 MiB
llama_kv_cache_unified:
LLAMA_SET_ROWS=0, using old ggml_cpy()
method for backwards compatibility
llama_context: Metal compute buffer size
= 296.00 MiB
llama_context:
                 CPU compute buffer size
= 16.01 MiB
llama_context: graph nodes = 1190
llama_context: graph splits = 2
common_init_from_params: added <|
end_of_text|> logit bias = -inf
common_init_from_params: added <|eot_id|
> logit bias = -inf
common_init_from_params: setting
dry_penalty_last_n to ctx_size = 4096
common_init_from_params: warming up the
model with an empty run - please wait ... (--
```

```
no-warmup to disable)
        init: initializing slots, n_slots = 1
srv
        init: id 0 | task -1 | new slot
slot
n_ctx_slot = 4096
main: model loaded
main: chat template, chat_template: {% set
loop_messages = messages %}{% for
message in loop_messages %}{% set content
= '<|start_header_id|>' + message['role'] +
'<|end_header_id|>
'+ message['content'] | trim + '<|eot_id|>' %}
\{\% \text{ if loop} \times \text{index0} == 0 \%\} \{\% \text{ set content} =
bos_token + content %}{% endif %}
{{ content }}{% endfor %}{% if
add_generation_prompt %}{{ '<|
start_header_id|>assistant<|end_header_id|
>
' }}{% endif %}, example_format: '<|
start_header_id|>system<|end_header_id|>
You are a helpful assistant<|eot_id|><|
start_header_id|>user<|end_header_id|>
```

```
Hello<|eot_id|><|start_header_id|
>assistant<|end_header_id|>
```

Hi there<|eot_id|><|start_header_id|>user<|end_header_id|>

How are you?<|eot_id|><|start_header_id|
>assistant<|end_header_id|>

main: server is listening on http://
127.0.0.1:8080 - starting the main loop
srv update_slots: all slots are idle
llama_model_load_from_file_impl: using
device Metal (Apple M1 Pro) - 10922 MiB
free

Ilama_model_loader: loaded meta data with 21 key-value pairs and 291 tensors from / Users/andrebaker/llama.cpp/models/meta-llama-3-8b-instruct.Q4_K_M.gguf (version GGUF V3 (latest))

Ilama_model_loader: Dumping metadata keys/values. Note: KV overrides do not apply in this output.

```
llama_model loader: - kv 0:
                            = Ilama
general.architecture str
llama_model_loader: - kv 1:
general.name str = Meta-Llama-3-8B-
Instruct
llama_model_loader: - kv 2:
llama.block_count u32
                            = 32
llama_model_loader: - kv 3:
                              = 8192
llama.context_length u32
llama_model_loader: - kv 4:
llama.embedding_length u32
                                  = 4096
llama_model_loader: - kv 5:
llama.feed_forward_length u32
14336
llama_model_loader: - kv 6:
llama.attention.head_count u32
                                    = 32
llama_model_loader: - kv 7:
llama.attention.head_count_kv u32
8
llama_model_loader: - kv 8:
llama.rope.freq_base f32
500000.000000
llama_model_loader: - kv 9:
llama.attention.layer_norm_rms_epsilon f32
= 0.000010
```

```
llama model loader: - kv 10:
general.file_type u32 = 15
llama_model_loader: - kv 11:
llama.vocab_size u32 = 128256
llama_model_loader: - kv 12:
llama.rope.dimension_count u32
128
llama model loader: - kv 13:
tokenizer.ggml.model str = gpt2
llama_model_loader: - kv 14:
tokenizer.ggml.tokens arr[str,128256] = ["!",
"\"", "#", "$", "%", "&", "'", ...
llama model loader: - kv 15:
tokenizer.ggml.token_type arr[i32,128256] =
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, ...
llama_model_loader: - kv 16:
tokenizer.ggml.merges arr[str,280147] = ["G
Ġ", "Ġ ĠĠĠ", "ĠĠ ĠĠ", "...
llama_model_loader: - kv 17:
tokenizer.ggml.bos_token_id u32
128000
llama_model_loader: - kv 18:
tokenizer.ggml.eos_token_id u32
128001
llama model loader: - kv 19:
```

```
tokenizer.chat_template str
                                 = {% set
loop_messages = messages %}{% xxx
llama_model_loader: - kv 20:
general.quantization_version u32
                                       = 2
llama_model_loader: - type f32: 65 tensors
llama_model_loader: - type q4_K: 193
tensors
llama_model_loader: - type q6_K: 33
tensors
print_info: file format = GGUF V3 (latest)
print_info: file type = Q4_K - Medium
print_info: file size = 4.58 \text{ GiB} (4.89 \text{ BPW})
load: missing pre-tokenizer type, using:
'default'
load:
load: ************************
load: GENERATION QUALITY WILL BE
DEGRADED!
load: CONSIDER REGENERATING THE
MODEL
load: ************************
load:
init_tokenizer: initializing tokenizer for type 2
load: control token: 128255 '<|
reserved_special_token_250|>' is not
```

marked as EOG

load: control token: 128253 '<|

reserved_special_token_248|>' is not

marked as EOG

load: control token: 128251 '<|

reserved_special_token_246|>' is not

marked as EOG

load: control token: 128249 '<|

reserved_special_token_244|>' is not

marked as EOG

load: control token: 128248 '<|

reserved_special_token_243|>' is not

marked as EOG

load: control token: 128247 '<|

reserved_special_token_242|>' is not

marked as EOG

load: control token: 128245 '<|

reserved_special_token_240|>' is not

marked as EOG

load: control token: 128244 '<|

reserved_special_token_239|>' is not

marked as EOG

load: control token: 128242 '<|

reserved_special_token_237|>' is not

marked as EOG

```
load: control token: 128241 '<|
```

reserved_special_token_236|>' is not

marked as EOG

load: control token: 128240 '<|

reserved_special_token_235|>' is not

marked as EOG

load: control token: 128237 '<

reserved_special_token_232|>' is not

marked as EOG

load: control token: 128235 '<|

reserved_special_token_230|>' is not

marked as EOG

load: control token: 128232 '<|

reserved_special_token_227|>' is not

marked as EOG

load: control token: 128231 '<|

reserved_special_token_226|>' is not

marked as EOG

load: control token: 128226 '<|

reserved_special_token_221|>' is not marked

as EOG

load: control token: 128224 '<|

reserved_special_token_219|>' is not

marked as EOG

load: control token: 128223 '<|

```
reserved_special_token_218|>' is not marked
as EOG
load: control token: 128221 '<|
reserved_special_token_216|>' is not
marked as EOG
load: control token: 128220 '<|
reserved_special_token_215|>' is not marked
as EOG
load: control token: 128218 '<|
reserved_special_token_213|>' is not marked
as EOG
load: control token: 128216 '<|
reserved_special_token_211|>' is not marked
as EOG
load: control token: 128215 '<|
reserved_special_token_210|>' is not marked
as EOG
load: control token: 128214 '<|
reserved_special_token_209|>' is not
marked as EOG
load: control token: 128213 '<|
reserved_special_token_208|>' is not
marked as EOG
load: control token: 128212 '<|
reserved_special_token_207|>' is not
```

```
marked as EOG
load: control token: 128210 '<|
reserved_special_token_205|>' is not
marked as EOG
load: control token: 128208 '<|
reserved_special_token_203|>' is not
marked as EOG
load: control token: 128207 '<
reserved_special_token_202|>' is not
marked as EOG
load: control token: 128206 '<|
reserved_special_token_201|>' is not marked
as EOG
load: control token: 128205 '<|
reserved_special_token_200|>' is not
marked as EOG
load: control token: 128204 '<|
reserved_special_token_199|>' is not
marked as EOG
load: control token: 128201 '<|
reserved_special_token_196|>' is not
marked as EOG
load: control token: 128199 '<|
reserved_special_token_194|>' is not
marked as EOG
```

```
load: control token: 128194 '<|
reserved_special_token_189|>' is not
marked as EOG
load: control token: 128192 '<|
reserved_special_token_187|>' is not marked
as EOG
load: control token: 128191 '<|
reserved_special_token_186|>' is not
marked as EOG
load: control token: 128188 '<|
reserved_special_token_183|>' is not marked
as EOG
load: control token: 128187 '<|
reserved_special_token_182|>' is not marked
as EOG
load: control token: 128185 '<|
reserved_special_token_180|>' is not
marked as EOG
load: control token: 128184 '<|
reserved_special_token_179|>' is not marked
as EOG
load: control token: 128182 '<|
reserved_special_token_177|>' is not marked
as EOG
load: control token: 128181 '<|
```

```
reserved_special_token_176|>' is not marked
as EOG
load: control token: 128180 '<|
reserved_special_token_175|>' is not marked
as EOG
load: control token: 128175 '<|
reserved_special_token_170|>' is not marked
as EOG
load: control token: 128174 '<|
reserved_special_token_169|>' is not
marked as EOG
load: control token: 128173 '<|
reserved_special_token_168|>' is not
marked as EOG
load: control token: 128172 '<|
reserved_special_token_167|>' is not marked
as EOG
load: control token: 128171 '<|
reserved_special_token_166|>' is not
marked as EOG
load: control token: 128170 '<|
reserved_special_token_165|>' is not
marked as EOG
load: control token: 128169 '<|
reserved_special_token_164|>' is not
```

```
marked as EOG
load: control token: 128166 '<|
reserved_special_token_161|>' is not marked
as EOG
load: control token: 128164 '<|
reserved_special_token_159|>' is not
marked as EOG
load: control token: 128163 '<|
reserved_special_token_158|>' is not marked
as EOG
load: control token: 128157 '<|
reserved_special_token_152|>' is not marked
as EOG
load: control token: 128156 '<|
reserved_special_token_151|>' is not marked
as EOG
load: control token: 128154 '<|
reserved_special_token_149|>' is not
marked as EOG
load: control token: 128153 '<|
reserved_special_token_148|>' is not
marked as EOG
load: control token: 128151 '<
reserved_special_token_146|>' is not
marked as EOG
```

```
load: control token: 128149 '<|
reserved_special_token_144|>' is not
marked as EOG
load: control token: 128148 '<|
reserved_special_token_143|>' is not
marked as EOG
load: control token: 128147 '<|
reserved_special_token_142|>' is not marked
as EOG
load: control token: 128144 '<|
reserved_special_token_139|>' is not
marked as EOG
load: control token: 128141 '<
reserved_special_token_136|>' is not
marked as EOG
load: control token: 128139 '<|
reserved_special_token_134|>' is not
marked as EOG
load: control token: 128138 '<|
reserved_special_token_133|>' is not marked
as EOG
load: control token: 128137 '<|
reserved_special_token_132|>' is not marked
as EOG
load: control token: 128130 '<
```

```
reserved_special_token_125|>' is not marked
as EOG
load: control token: 128127 '<|
reserved_special_token_122|>' is not marked
as EOG
load: control token: 128125 '<|
reserved_special_token_120|>' is not marked
as EOG
load: control token: 128124 '<|
reserved_special_token_119|>' is not marked
as EOG
load: control token: 128123 '<|
reserved_special_token_118|>' is not marked
as EOG
load: control token: 128122 '<|
reserved_special_token_117|>' is not marked
as EOG
load: control token: 128121 '<|
reserved_special_token_116|>' is not marked
as EOG
load: control token: 128120 '<|
reserved_special_token_115|>' is not marked
as EOG
load: control token: 128119 '<|
reserved_special_token_114|>' is not marked
```

```
as EOG
load: control token: 128118 '<
reserved_special_token_113|>' is not marked
as EOG
load: control token: 128117 '<|
reserved_special_token_112|>' is not marked
as EOG
load: control token: 128116 '<|
reserved_special_token_111|>' is not marked
as EOG
load: control token: 128113 '<|
reserved_special_token_108|>' is not
marked as EOG
load: control token: 128112 '<|
reserved_special_token_107|>' is not marked
as EOG
load: control token: 128111 '<|
reserved_special_token_106|>' is not
marked as EOG
load: control token: 128110 '<|
reserved_special_token_105|>' is not marked
as EOG
load: control token: 128108 '<|
reserved_special_token_103|>' is not marked
as EOG
```

```
load: control token: 128107 '<
reserved_special_token_102|>' is not marked
as EOG
load: control token: 128104 '<|
reserved_special_token_99|>' is not marked
as EOG
load: control token: 128103 '<
reserved_special_token_98|>' is not marked
as EOG
load: control token: 128102 '<|
reserved_special_token_97|>' is not marked
as EOG
load: control token: 128101 '<
reserved_special_token_96|>' is not marked
as EOG
load: control token: 128100 '<|
reserved_special_token_95|>' is not marked
as EOG
load: control token: 128097 '<|
reserved_special_token_92|>' is not marked
as EOG
load: control token: 128094 '<|
reserved_special_token_89|>' is not marked
as EOG
load: control token: 128093 '<|
```

```
reserved_special_token_88|>' is not marked
as EOG
load: control token: 128091 '<|
reserved_special_token_86|>' is not marked
as EOG
load: control token: 128090 '<|
reserved_special_token_85|>' is not marked
as EOG
load: control token: 128087 '<|
reserved_special_token_82|>' is not marked
as EOG
load: control token: 128086 '<|
reserved_special_token_81|>' is not marked
as EOG
load: control token: 128084 '<|
reserved_special_token_79|>' is not marked
as EOG
load: control token: 128082 '<|
reserved_special_token_77|>' is not marked
as EOG
load: control token: 128077 '<|
reserved_special_token_72|>' is not marked
as EOG
load: control token: 128074 '<
reserved_special_token_69|>' is not marked
```

```
as EOG
load: control token: 128073 '<
reserved_special_token_68|>' is not marked
as EOG
load: control token: 128070 '<|
reserved_special_token_65|>' is not marked
as EOG
load: control token: 128067 '<|
reserved_special_token_62|>' is not marked
as EOG
load: control token: 128066 '<|
reserved_special_token_61|>' is not marked
as EOG
load: control token: 128064 '<|
reserved_special_token_59|>' is not marked
as EOG
load: control token: 128061 '<
reserved_special_token_56|>' is not marked
as EOG
load: control token: 128059 '<|
reserved_special_token_54|>' is not marked
as EOG
load: control token: 128058 '<|
reserved_special_token_53|>' is not marked
as EOG
```

```
load: control token: 128057 '<|
reserved_special_token_52|>' is not marked
as EOG
load: control token: 128051 '<|
reserved_special_token_46|>' is not marked
as EOG
load: control token: 128042 '<
reserved_special_token_37|>' is not marked
as EOG
load: control token: 128041 '<
reserved_special_token_36|>' is not marked
as EOG
load: control token: 128040 '<|
reserved_special_token_35|>' is not marked
as EOG
load: control token: 128039 '<|
reserved_special_token_34|>' is not marked
as EOG
load: control token: 128035 '<
reserved_special_token_30|>' is not marked
as EOG
load: control token: 128034 '<|
reserved_special_token_29|>' is not marked
as EOG
load: control token: 128032 '<|
```

```
reserved_special_token_27|>' is not marked
as EOG
load: control token: 128031 '<|
reserved_special_token_26|>' is not marked
as EOG
load: control token: 128030 '<|
reserved_special_token_25|>' is not marked
as EOG
load: control token: 128029 '<|
reserved_special_token_24|>' is not marked
as EOG
load: control token: 128027 '<|
reserved_special_token_22|>' is not marked
as EOG
load: control token: 128026 '<|
reserved_special_token_21|>' is not marked
as EOG
load: control token: 128025 '<|
reserved_special_token_20|>' is not marked
as EOG
load: control token: 128023 '<|
reserved_special_token_18|>' is not marked
as EOG
load: control token: 128022 '<|
reserved_special_token_17|>' is not marked
```

```
as EOG
load: control token: 128021 '<|
reserved_special_token_16|>' is not marked
as EOG
load: control token: 128019 '<|
reserved_special_token_14|>' is not marked
as FOG
load: control token: 128017 '<|
reserved_special_token_12|>' is not marked
as EOG
load: control token: 128014 '<|
reserved_special_token_9|>' is not marked
as EOG
load: control token: 128013 '<|
reserved_special_token_8|>' is not marked
as EOG
load: control token: 128012 '<|
reserved_special_token_7|>' is not marked
as EOG
load: control token: 128011 '<
reserved_special_token_6|>' is not marked
as EOG
load: control token: 128010 '<|
reserved_special_token_5|>' is not marked
as EOG
```

```
load: control token: 128006 '<|
start_header_id|>' is not marked as EOG
load: control token: 128005 '<|
reserved_special_token_3|>' is not marked
as EOG
load: control token: 128003 '<
reserved_special_token_1|>' is not marked as
EOG
load: control token: 128002 '<|
reserved_special_token_0|>' is not marked
as EOG
load: control token: 128000 '<|begin_of_text|
>' is not marked as EOG
load: control token: 128038 '<|
reserved_special_token_33|>' is not marked
as EOG
load: control token: 128060 '<|
reserved_special_token_55|>' is not marked
as EOG
load: control token: 128043 '<|
reserved_special_token_38|>' is not marked
as EOG
load: control token: 128007 '<
end_header_id|>' is not marked as EOG
load: control token: 128062 '<|
```

```
reserved_special_token_57|>' is not marked
as EOG
load: control token: 128168 '<|
reserved_special_token_163|>' is not
marked as EOG
load: control token: 128159 '<|
reserved_special_token_154|>' is not marked
as EOG
load: control token: 128162 '<|
reserved_special_token_157|>' is not marked
as EOG
load: control token: 128054 '<|
reserved_special_token_49|>' is not marked
as EOG
load: control token: 128047 '<|
reserved_special_token_42|>' is not marked
as EOG
load: control token: 128053 '<|
reserved_special_token_48|>' is not marked
as EOG
load: control token: 128227 '<
reserved_special_token_222|>' is not
marked as EOG
load: control token: 128095 '<
reserved_special_token_90|>' is not marked
```

```
as EOG
load: control token: 128150 '<|
reserved_special_token_145|>' is not marked
as EOG
load: control token: 128081 '<|
reserved_special_token_76|>' is not marked
as EOG
load: control token: 128079 '<|
reserved_special_token_74|>' is not marked
as EOG
load: control token: 128099 '<|
reserved_special_token_94|>' is not marked
as EOG
load: control token: 128250 '<|
reserved_special_token_245|>' is not
marked as EOG
load: control token: 128176 '<|
reserved_special_token_171|>' is not marked
as EOG
load: control token: 128068 '<|
reserved_special_token_63|>' is not marked
as EOG
load: control token: 128132 '<|
reserved_special_token_127|>' is not marked
as EOG
```

```
load: control token: 128158 '<
reserved_special_token_153|>' is not marked
as EOG
load: control token: 128161 '<|
reserved_special_token_156|>' is not
marked as EOG
load: control token: 128131 '<|
reserved_special_token_126|>' is not marked
as EOG
load: control token: 128246 '<|
reserved_special_token_241|>' is not marked
as EOG
load: control token: 128254 '<|
reserved_special_token_249|>' is not
marked as EOG
load: control token: 128033 '<|
reserved_special_token_28|>' is not marked
as EOG
load: control token: 128145 '<|
reserved_special_token_140|>' is not
marked as EOG
load: control token: 128178 '<|
reserved_special_token_173|>' is not marked
as EOG
load: control token: 128219 '<|
```

```
reserved_special_token_214|>' is not marked
as EOG
load: control token: 128072 '<|
reserved_special_token_67|>' is not marked
as EOG
load: control token: 128238 '<|
reserved_special_token_233|>' is not
marked as EOG
load: control token: 128048 '<|
reserved_special_token_43|>' is not marked
as EOG
load: control token: 128065 '<|
reserved_special_token_60|>' is not marked
as EOG
load: control token: 128146 '<|
reserved_special_token_141|>' is not marked
as EOG
load: control token: 128198 '<|
reserved_special_token_193|>' is not
marked as EOG
load: control token: 128055 '<|
reserved_special_token_50|>' is not marked
as EOG
load: control token: 128143 '<|
reserved_special_token_138|>' is not marked
```

```
as EOG
load: control token: 128140 '<|
reserved_special_token_135|>' is not marked
as EOG
load: control token: 128020 '<|
reserved_special_token_15|>' is not marked
as FOG
load: control token: 128036 '<|
reserved_special_token_31|>' is not marked
as EOG
load: control token: 128129 '<|
reserved_special_token_124|>' is not marked
as EOG
load: control token: 128098 '<|
reserved_special_token_93|>' is not marked
as EOG
load: control token: 128209 '<|
reserved_special_token_204|>' is not
marked as EOG
load: control token: 128186 '<|
reserved_special_token_181|>' is not marked
as EOG
load: control token: 128222 '<|
reserved_special_token_217|>' is not marked
as EOG
```

```
load: control token: 128126 '<|
reserved_special_token_121|>' is not marked
as EOG
load: control token: 128004 '<|
reserved_special_token_2|>' is not marked
as EOG
load: control token: 128075 '<
reserved_special_token_70|>' is not marked
as EOG
load: control token: 128160 '<|
reserved_special_token_155|>' is not marked
as EOG
load: control token: 128069 '<
reserved_special_token_64|>' is not marked
as EOG
load: control token: 128109 '<|
reserved_special_token_104|>' is not
marked as EOG
load: control token: 128183 '<|
reserved_special_token_178|>' is not marked
as EOG
load: control token: 128092 '<|
reserved_special_token_87|>' is not marked
as EOG
load: control token: 128106 '<|
```

```
reserved_special_token_101|>' is not marked
as EOG
load: control token: 128096 '<|
reserved_special_token_91|>' is not marked
as EOG
load: control token: 128135 '<|
reserved_special_token_130|>' is not marked
as EOG
load: control token: 128190 '<|
reserved_special_token_185|>' is not marked
as EOG
load: control token: 128196 '<|
reserved_special_token_191|>' is not marked
as EOG
load: control token: 128045 '<|
reserved_special_token_40|>' is not marked
as EOG
load: control token: 128085 '<|
reserved_special_token_80|>' is not marked
as EOG
load: control token: 128189 '<|
reserved_special_token_184|>' is not
marked as EOG
load: control token: 128133 '<|
reserved_special_token_128|>' is not marked
```

```
as EOG
load: control token: 128089 '<|
reserved_special_token_84|>' is not marked
as EOG
load: control token: 128155 '<|
reserved_special_token_150|>' is not marked
as EOG
load: control token: 128046 '<|
reserved_special_token_41|>' is not marked
as EOG
load: control token: 128028 '<|
reserved_special_token_23|>' is not marked
as EOG
load: control token: 128252 '<|
reserved_special_token_247|>' is not
marked as EOG
load: control token: 128179 '<|
reserved_special_token_174|>' is not marked
as EOG
load: control token: 128063 '<|
reserved_special_token_58|>' is not marked
as EOG
load: control token: 128177 '<|
reserved_special_token_172|>' is not marked
as EOG
```

```
load: control token: 128230 '<
reserved_special_token_225|>' is not
marked as EOG
load: control token: 128076 '<|
reserved_special_token_71|>' is not marked
as EOG
load: control token: 128078 '<
reserved_special_token_73|>' is not marked
as EOG
load: control token: 128228 '<|
reserved_special_token_223|>' is not
marked as EOG
load: control token: 128193 '<
reserved_special_token_188|>' is not
marked as EOG
load: control token: 128044 '<|
reserved_special_token_39|>' is not marked
as EOG
load: control token: 128080 '<|
reserved_special_token_75|>' is not marked
as EOG
load: control token: 128136 '<|
reserved_special_token_131|>' is not marked
as EOG
load: control token: 128128 '<|
```

```
reserved_special_token_123|>' is not marked
as EOG
load: control token: 128115 '<|
reserved_special_token_110|>' is not marked
as EOG
load: control token: 128050 '<|
reserved_special_token_45|>' is not marked
as EOG
load: control token: 128217 '<|
reserved_special_token_212|>' is not marked
as EOG
load: control token: 128105 '<|
reserved_special_token_100|>' is not
marked as EOG
load: control token: 128088 '<|
reserved_special_token_83|>' is not marked
as EOG
load: control token: 128200 '<|
reserved_special_token_195|>' is not
marked as EOG
load: control token: 128056 '<|
reserved_special_token_51|>' is not marked
as EOG
load: control token: 128016 '<|
reserved_special_token_11|>' is not marked
```

```
as EOG
load: control token: 128167 '<|
reserved_special_token_162|>' is not marked
as EOG
load: control token: 128202 '<|
reserved_special_token_197|>' is not marked
as EOG
load: control token: 128037 '<|
reserved_special_token_32|>' is not marked
as EOG
load: control token: 128197 '<|
reserved_special_token_192|>' is not marked
as EOG
load: control token: 128233 '<|
reserved_special_token_228|>' is not
marked as EOG
load: control token: 128142 '<|
reserved_special_token_137|>' is not marked
as EOG
load: control token: 128165 '<|
reserved_special_token_160|>' is not
marked as EOG
load: control token: 128211 '<
reserved_special_token_206|>' is not
marked as EOG
```

```
load: control token: 128134 '<|
reserved_special_token_129|>' is not marked
as EOG
load: control token: 128229 '<|
reserved_special_token_224|>' is not
marked as EOG
load: control token: 128236 '<|
reserved_special_token_231|>' is not marked
as EOG
load: control token: 128052 '<|
reserved_special_token_47|>' is not marked
as EOG
load: control token: 128225 '<
reserved_special_token_220|>' is not
marked as EOG
load: control token: 128203 '<|
reserved_special_token_198|>' is not
marked as EOG
load: control token: 128015 '<|
reserved_special_token_10|>' is not marked
as EOG
load: control token: 128008 '<|
reserved_special_token_4|>' is not marked
as EOG
load: control token: 128195 '<|
```

```
reserved_special_token_190|>' is not
marked as EOG
load: control token: 128018 '<|
reserved_special_token_13|>' is not marked
as EOG
load: control token: 128083 '<|
reserved_special_token_78|>' is not marked
as EOG
load: control token: 128071 '<|
reserved_special_token_66|>' is not marked
as EOG
load: control token: 128024 '<|
reserved_special_token_19|>' is not marked
as EOG
load: control token: 128239 '<|
reserved_special_token_234|>' is not
marked as EOG
load: control token: 128152 '<|
reserved_special_token_147|>' is not marked
as EOG
load: control token: 128049 '<|
reserved_special_token_44|>' is not marked
as EOG
load: control token: 128243 '<
reserved_special_token_238|>' is not
```

```
marked as EOG
load: control token: 128114 '<|
reserved_special_token_109|>' is not
marked as EOG
load: control token: 128234 '<|
reserved_special_token_229|>' is not
marked as EOG
load: special tokens cache size = 256
load: token to piece cache size = 0.8000 MB
print_info: arch = Ilama
print_info: vocab_only = 0
print_info: n_ctx_train = 8192
print_info: n_embd = 4096
print_info: n_layer = 32
print_info: n_head = 32
print_info: n_head_kv = 8
print_info: n_rot = 128
print_info: n_swa = 0
print_info: is_swa_any = 0
print_info: n_embd_head_k = 128
print_info: n_embd_head_v = 128
print_info: n_gqa = 4
print_info: n_embd_k_gqa = 1024
print_info: n_embd_v_gqa = 1024
print_info: f_norm_eps = 0.0e+00
```

```
print_info: f_norm_rms_eps = 1.0e-05
print_info: f_clamp_kqv = 0.0e+00
print_info: f_max_alibi_bias = 0.0e+00
print_info: f_logit_scale = 0.0e+00
print_info: f_attn_scale = 0.0e+00
print_info: n_ff = 14336
print_info: n_expert = 0
print_info: n_expert_used = 0
print_info: causal attn = 1
print_info: pooling type = 0
print_info: rope type = 0
print_info: rope scaling = linear
print_info: freq_base_train = 500000.0
print_info: freq_scale_train = 1
print_info: n_ctx_orig_yarn = 8192
print_info: rope_finetuned = unknown
print_info: model type = 8B
print_info: model params = 8.03 B
print_info: general.name = Meta-
Llama-3-8B-Instruct
print_info: vocab type = BPE
print_info: n_vocab = 128256
print_info: n_merges = 280147
print_info: BOS token = 128000 '<|
begin_of_text|>'
```

```
print_info: EOS token
                        = 128001 '<|
end_of_text|>'
print_info: EOT token
                        = 128009 '<|eot_id|
>'
print_info: LF token = 198 'C'
print_info: EOG token
                         = 128001 '<|
end_of_text|>'
print_info: EOG token = 128009 '<|
eot_id|>'
print_info: max token length = 256
load_tensors: loading model tensors, this can
take a while... (mmap = true)
load_tensors: layer 0 assigned to device
Metal, is_swa = 0
load_tensors: layer 1 assigned to device
Metal, is_swa = 0
load_tensors: layer 2 assigned to device
Metal, is_swa = 0
load_tensors: layer 3 assigned to device
Metal, is_swa = 0
load_tensors: layer 4 assigned to device
Metal, is_swa = 0
load_tensors: layer 5 assigned to device
Metal, is_swa = 0
load_tensors: layer 6 assigned to device
```

Metal, is_swa = 0

load_tensors: layer 7 assigned to device

Metal, is_swa = 0

load_tensors: layer 8 assigned to device

Metal, is_swa = 0

load_tensors: layer 9 assigned to device

Metal, is_swa = 0

load_tensors: layer 10 assigned to device

Metal, is_swa = 0

load_tensors: layer 11 assigned to device

Metal, is_swa = 0

load_tensors: layer 12 assigned to device

Metal, is_swa = 0

load_tensors: layer 13 assigned to device

Metal, is_swa = 0

load_tensors: layer 14 assigned to device

Metal, is_swa = 0

load_tensors: layer 15 assigned to device

Metal, is_swa = 0

load_tensors: layer 16 assigned to device

Metal, is_swa = 0

load_tensors: layer 17 assigned to device

Metal, is_swa = 0

load_tensors: layer 18 assigned to device

Metal, is_swa = 0

load_tensors: layer 19 assigned to device

Metal, is_swa = 0

load_tensors: layer 20 assigned to device

Metal, is_swa = 0

load_tensors: layer 21 assigned to device

Metal, is_swa = 0

load_tensors: layer 22 assigned to device

Metal, is_swa = 0

load_tensors: layer 23 assigned to device

Metal, is_swa = 0

load_tensors: layer 24 assigned to device

Metal, is_swa = 0

load_tensors: layer 25 assigned to device

Metal, is_swa = 0

load_tensors: layer 26 assigned to device

Metal, is_swa = 0

load_tensors: layer 27 assigned to device

Metal, is_swa = 0

load_tensors: layer 28 assigned to device

Metal, is_swa = 0

load_tensors: layer 29 assigned to device

Metal, is_swa = 0

load_tensors: layer 30 assigned to device

Metal, is_swa = 0

load_tensors: layer 31 assigned to device

```
Metal, is_swa = 0
load_tensors: layer 32 assigned to device
Metal, is_swa = 0
load_tensors: tensor 'token_embd.weight'
(q4_K) (and 0 others) cannot be used with
preferred buffer type CPU_REPACK, using
CPU instead
ggml_backend_metal_log_allocated_size:
allocated buffer, size = 4403.50 MiB,
(4403.56 / 10922.67)
load_tensors: offloading 32 repeating layers
to GPU
load_tensors: offloading output layer to GPU
load_tensors: offloaded 33/33 layers to GPU
load_tensors: Metal_Mapped model buffer
size = 4403.50 MiB
load_tensors: CPU_Mapped model buffer
size = 281.81 MiB
Ilama_context: constructing Ilama_context
llama_context: n_seq_max = 1
llama_context: n_ctx = 4096
llama_context: n_ctx_per_seq = 4096
Ilama context: n batch = 512
```

```
llama_context: n_ubatch = 512
llama context: causal attn = 1
llama_context: flash_attn = 0
llama_context: freq_base = 500000.0
llama_context: freq_scale = 1
llama_context: n_ctx_per_seq (4096) <</pre>
n_ctx_train (8192) -- the full capacity of the
model will not be utilized
ggml_metal_init: allocating
ggml_metal_init: found device: Apple M1 Pro
ggml_metal_init: picking default device:
Apple M1 Pro
ggml_metal_load_library: using embedded
metal library
ggml_metal_init: GPU name: Apple M1 Pro
ggml_metal_init: GPU family:
MTLGPUFamilyApple7 (1007)
ggml_metal_init: GPU family:
MTLGPUFamilyCommon3 (3003)
ggml_metal_init: GPU family:
MTLGPUFamilyMetal3 (5001)
ggml_metal_init: simdgroup reduction = true
ggml_metal_init: simdgroup matrix mul. =
true
ggml_metal_init: has residency sets = true
```

```
ggml_metal_init: has bfloat = true
ggml_metal_init: use bfloat = false
ggml_metal_init: hasUnifiedMemory = true
ggml_metal_init:
recommendedMaxWorkingSetSize =
11453.25 MB
ggml metal init: loaded kernel add
0x10783cc80 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_add_row
0x10783d0e0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sub
0x10783d800 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sub_row
0x10783df20 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_mul
0x10783e640 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_mul_row
0x126604400 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_div
```

```
0x10783f160 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_div_row
0x10669acd0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_repeat_f32
0x1079152f0 \mid th max = 1024 \mid th width =
32
ggml_metal_init: loaded kernel_repeat_f16
0x1267be7c0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_repeat_i32
0x10783f710 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_repeat_i16
0x1267bedd0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_scale
0x1267bf3a0 | th_max = 1024 | th_width =
32
ggml metal init: loaded kernel scale 4
0x10783fe10 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_clamp
0x107840940 | th_max = 1024 | th_width =
```

```
32
ggml_metal_init: loaded kernel_tanh
0x1066a0a40 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_relu
0x107840e20 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sigmoid
0x1266c1350 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_gelu
0x1078414d0 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_gelu_4
0x107841fc0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_gelu_erf
0x1267c02b0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_gelu_erf_4
0x1078427d0 | th max = 1024 | th width =
32
ggml_metal_init: loaded kernel_gelu_quick
0x107843030 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded kernel_gelu_quick_4
0x1267c0aa0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_silu
0x1267c1190 | th_max = 1024 | th_width =
32
ggml metal init: loaded kernel silu 4
0x107843840 | th max = 1024 | th width =
32
ggml_metal_init: loaded kernel_elu
0x1078440a0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_abs
0x1267c1880 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sgn
0x1078448b0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_step
0x107845110 | th max = 1024 | th width =
32
ggml_metal_init: loaded kernel_hardswish
0x107845920 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_hardsigmoid
```

```
0x107846130 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_exp
0x1078466c0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_soft_max_f16
0x1267c1ef0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_soft_max_f16_4
0x1267c2330 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_soft_max_f32
0x1267c2a50 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_soft_max_f32_4
0x107846c50 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_diag_mask_inf
0x107847090 \mid th_max = 1024 \mid th_width =
32
```

```
ggml_metal_init: loaded
kernel_diag_mask_inf_8
0x1078476b0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_f32
0x107847ce0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_f16
0x1267c34c0 | th_max = 1024 | th_width =
32
ggml_metal_init: skipping
kernel_get_rows_bf16
                               (not
supported)
ggml_metal_init: loaded
kernel_get_rows_q4_0
0x1267c3720 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q4_1
0x107848650 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q5_0
```

```
0x1267c4090 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q5_1
0x107848c00 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q8_0
0x1267c4640 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_get_rows_g2_K
0x1078491b0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q3_K
0x107849e00 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q4_K
0x1267c4a10 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_get_rows_q5_K
0x1267c4e50 | th_max = 1024 | th_width =
```

```
32
ggml_metal_init: loaded
kernel_get_rows_q6_K
0x10784a240 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq2_xxs
0x10784a4a0 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq2_xs
0x1267c5290 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq3_xxs
0x10784ae30 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq3_s
0x10784b090 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq2_s
0x104e09c60 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_get_rows_iq1_s
0x10784ba90 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq1_m
0x1267c5850 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq4_nl
0x10784c0d0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_iq4_xs
0x1267c1ae0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_get_rows_i32
0x1267c5d80 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_set_rows_f32
0x1267c6780 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_set_rows_f16
```

```
0x10784c690 | th_max = 1024 | th_width =
32
ggml_metal_init: skipping
                               (not
kernel_set_rows_bf16
supported)
ggml_metal_init: loaded
kernel_set_rows_q8_0
0x1267c6bc0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_set_rows_q4_0
0x10784cc40 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_set_rows_q4_1
0x1267c7170 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_set_rows_q5_0
0x10784d1f0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_set_rows_q5_1
0x10784d910 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_set_rows_iq4_nl
0x10784db70 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_rms_norm
0x1267c7720 | th_max = 1024 | th_width =
32
ggml metal init: loaded kernel 12 norm
0x10784e3d0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_group_norm
0x10784e630 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_norm
0x10784ec50 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_ssm_conv_f32
0x10784f730 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_ssm_scan_f32
0x10784fd90 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_ssm_scan_f32_group
0x10784fff0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rwkv_wkv6_f32
0x107850400 | th_max = 384 | th_width =
32
ggml_metal_init: loaded
kernel_rwkv_wkv7_f32
0x107850a20 | th_max = 448 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_f32_f32
0x1267c7cd0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_f32_f32_c4
0x107851390 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32
                                 (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_c4
                                    (not
supported)
```

```
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_1row
                                    (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_f32_l4
                                   (not
supported)
ggml_metal_init: skipping
kernel_mul_mv_bf16_bf16
                                  (not
supported)
ggml_metal_init: loaded
kernel_mul_mv_f16_f32
0x107851ab0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_f16_f32_c4
0x107851d10 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_f16_f32_1row
0x1078526f0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_f16_f32_l4
0x107852ca0 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_mul_mv_f16_f16
0x1267c8290 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q4_0_f32
0x1267c89c0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q4_1_f32
0x1078530e0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q5_0_f32
0x10794b6a0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q5_1_f32
0x1078536a0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q8_0_f32
0x107853dd0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mv_ext_f16_f32_r1_2
0x1267c8c20 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_f16_f32_r1_3
0x107854030 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_f16_f32_r1_4
0x107854440 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_f16_f32_r1_5
0x107854e30 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_0_f32_r1_2
0x1078555b0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_0_f32_r1_3
0x107855930 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_0_f32_r1_4
```

```
0x107855e30 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_0_f32_r1_5
0x1267c9360 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_1_f32_r1_2
0x107856090 \mid th_max = 832 \mid th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_1_f32_r1_3
0x1267c9ad0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_1_f32_r1_4
0x1078562f0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_1_f32_r1_5
0x1267ca230 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_0_f32_r1_2
0x1267ca490 | th_max = 704 | th_width =
```

```
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_0_f32_r1_3
0x1078568a0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_0_f32_r1_4
0x107856cb0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_0_f32_r1_5
0x1078576a0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_1_f32_r1_2
0x107857e20 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_1_f32_r1_3
0x1267caf00 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_1_f32_r1_4
0x10794b900 | th_max = 576 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_1_f32_r1_5
0x107858080 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q8_0_f32_r1_2
0x107858760 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q8_0_f32_r1_3
0x107858cc0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q8_0_f32_r1_4
0x107859220 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q8_0_f32_r1_5
0x1267cb160 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_K_f32_r1_2
0x1267cb9f0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mv_ext_q4_K_f32_r1_3
0x1267cbf50 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_K_f32_r1_4
0x1078595a0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q4_K_f32_r1_5
0x107859800 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_K_f32_r1_2
0x107859e30 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_K_f32_r1_3
0x10785a4b0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_K_f32_r1_4
0x1266c15b0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q5_K_f32_r1_5
```

```
0x10785adf0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q6_K_f32_r1_2
0x1267cc450 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q6_K_f32_r1_3
0x1267ccbb0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q6_K_f32_r1_4
0x10785b170 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_q6_K_f32_r1_5
0x1267cce10 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_iq4_nl_f32_r1_2
0x10785b6d0 | th max = 832 | th width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_iq4_nl_f32_r1_3
0x1267cd580 | th_max = 704 | th_width =
```

```
32
ggml_metal_init: loaded
kernel_mul_mv_ext_iq4_nl_f32_r1_4
0x10785be40 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_ext_iq4_nl_f32_r1_5
0x10785c5a0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q2_K_f32
0x10785c920 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q3_K_f32
0x1267cda50 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q4_K_f32
0x10785cca0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_q5_K_f32
0x10785d3d0 | th_max = 576 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_mul_mv_q6_K_f32
0x10785d980 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq2_xxs_f32
0x1267cdcb0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq2_xs_f32
0x10794c890 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq3_xxs_f32
0x1267ce520 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq3_s_f32
0x1266c1b10 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq2_s_f32
0x10785ddc0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mv_iq1_s_f32
0x10785e020 | th_max = 448 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq1_m_f32
0x1267ceae0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq4_nl_f32
0x10785e950 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_iq4_xs_f32
0x10785f240 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_f32_f32
0x10785f7f0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_f16_f32
0x1267cf0a0 | th_max = 1024 | th_width =
32
ggml_metal_init: skipping
kernel_mul_mv_id_bf16_f32
                                   (not
```

```
supported)
ggml_metal_init: loaded
kernel_mul_mv_id_q4_0_f32
0x10785fc30 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q4_1_f32
0x1267cf660 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q5_0_f32
0x1078601f0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q5_1_f32
0x107860920 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q8_0_f32
0x10794cca0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q2_K_f32
0x107e043d0 | th_max = 576 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_mul_mv_id_q3_K_f32
0x106695df0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q4_K_f32
0x10794d0b0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q5_K_f32
0x107860f10 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_q6_K_f32
0x1066a0cf0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq2_xxs_f32
0x1078614d0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq2_xs_f32
0x107861c00 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mv_id_iq3_xxs_f32
0x1078621b0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq3_s_f32
0x1266c2070 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq2_s_f32
0x1066a0f50 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq1_s_f32
0x1078625f0 | th_max = 448 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq1_m_f32
0x107862850 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq4_nl_f32
0x107863260 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mv_id_iq4_xs_f32
```

```
0x107863810 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_f32_f32
0x1267cfbf0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_f16_f32
0x107863c50 | th_max = 832 | th_width =
32
ggml_metal_init: skipping
kernel_mul_mm_bf16_f32
                                  (not
supported)
ggml_metal_init: loaded
kernel_mul_mm_q4_0_f32
0x107864380 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q4_1_f32
0x107864930 | th max = 768 | th width =
32
ggml_metal_init: loaded
kernel_mul_mm_q5_0_f32
0x1267d0360 | th_max = 768 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_mul_mm_q5_1_f32
0x107864d70 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q8_0_f32
0x1267d0920 \mid th_max = 832 \mid th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q2_K_f32
0x107865330 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q3_K_f32
0x1267d0ee0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q4_K_f32
0x1078658f0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_q5_K_f32
0x107866020 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mm_q6_K_f32
0x107866460 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq2_xxs_f32
0x1267d14a0 \mid th_max = 768 \mid th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq2_xs_f32
0x1267d1700 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq3_xxs_f32
0x107866ab0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq3_s_f32
0x107866d10 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq2_s_f32
0x1267d1fa0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq1_s_f32
```

```
0x1078673d0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq1_m_f32
0x1267d25f0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq4_nl_f32
0x107867be0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_iq4_xs_f32
0x1267d2bb0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_map0_f16
0x1266c2750 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_map1_f32
0x1078681a0 | th max = 1024 | th width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_f32_f16
0x1078688d0 | th_max = 896 | th_width =
```

```
32
ggml_metal_init: loaded
kernel_mul_mm_id_f16_f16
0x1267d3170 | th_max = 896 | th_width =
32
ggml_metal_init: skipping
kernel_mul_mm_id_bf16_f16
                                   (not
supported)
ggml_metal_init: loaded
kernel_mul_mm_id_q4_0_f16
0x1267d38a0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q4_1_f16
0x107868d10 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q5_0_f16
0x1267d3ce0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q5_1_f16
0x1078692d0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_mul_mm_id_q8_0_f16
0x1267d42a0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q2_K_f16
0x107869890 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q3_K_f16
0x1267d4860 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q4_K_f16
0x1267d4f90 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q5_K_f16
0x107869e50 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_q6_K_f16
0x1267d53d0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq2_xxs_f16
```

```
0x1267d5630 \mid th_max = 832 \mid th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq2_xs_f16
0x10786a410 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq3_xxs_f16
0x1267d5cf0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq3_s_f16
0x1267d6110 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq2_s_f16
0x10786aa80 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq1_s_f16
0x10786ace0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq1_m_f16
0x1267d67d0 | th_max = 896 | th_width =
```

```
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq4_nl_f16
0x1266c2cb0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_mul_mm_id_iq4_xs_f16
0x10786b3a0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_rope_norm_f32
0x1267d7000 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_norm_f16
0x1267d74f0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_multi_f32
0x10786bbc0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_multi_f16
0x1267d7750 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_rope_vision_f32
0x10794d970 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_vision_f16
0x1267d7d10 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_neox_f32
0x10786c220 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_rope_neox_f16
0x10786c480 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_im2col_f16
0x10786d060 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_im2col_f32
0x1267d8150 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_im2col_ext_f16
0x1267d8870 \mid th_max = 1024 \mid th_width =
```

```
32
ggml_metal_init: loaded
kernel_im2col_ext_f32
0x1267d8f40 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_conv_transpose_1d_f32_f32
0x10786d4a0 | th max = 1024 | th width =
32
ggml_metal_init: loaded
kernel_conv_transpose_1d_f16_f32
0x10786d700 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_upscale_f32
0x10786dea0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_pad_f32
0x10786e600 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_pad_reflect_1d_f32
0x10786e860 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_timestep_embedding_f32
```

```
0x10786ed70 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_arange_f32
0x10786f3a0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_argsort_f32_i32_asc
0x10794e080 | th max = 1024 | th width =
32
ggml_metal_init: loaded
kernel_argsort_f32_i32_desc
0x1267d91a0 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_leaky_relu_f32
0x1267d9fc0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h64
0x10786fdd0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h80
0x107870030 | th_max = 704 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h96
0x107870760 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h112
0x1267da220 | th max = 576 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h128
0x1267da630 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h192
0x1078712a0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_hk192_hv128
0x1267db170 | th max = 576 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_f16_h256
0x1267db3d0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_flash_attn_ext_f16_hk576_hv512
0x107871680 | th_max = 832 | th_width =
32
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h64
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h80
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h96
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h112
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h128
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_h192
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_hk192_hv128
(not supported)
ggml_metal_init: skipping
```

```
kernel_flash_attn_ext_bf16_h256
                                     (not
supported)
ggml_metal_init: skipping
kernel_flash_attn_ext_bf16_hk576_hv512
(not supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h64
0x1267dbf10 | th max = 640 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h80
0x1267dc170 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h96
0x107871a90 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h112
0x107871ea0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h128
0x1267dcbe0 | th_max = 768 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h192
0x1267dce40 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_hk192_hv128
0x1078383d0 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_h256
0x107872730 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_0_hk576_hv512
0x1267dd730 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h64
0x1078731b0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h80
0x1267ddab0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_flash_attn_ext_q4_1_h96
0x107873410 \mid th_max = 832 \mid th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h112
0x107873ca0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h128
0x107874200 | th max = 768 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h192
0x107874b00 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_hk192_hv128
0x1267ddd10 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_h256
0x107874d60 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q4_1_hk576_hv512
```

```
0x1267de2b0 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h64
0x107875150 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h80
0x107875680 \mid th_max = 704 \mid th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h96
0x107875f10 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h112
0x107876470 \mid th_max = 704 \mid th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h128
0x1267deb60 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h192
0x1267dedc0 \mid th_max = 704 \mid th_width =
```

```
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_hk192_hv128
0x1078766d0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_h256
0x1267df460 | th max = 704 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_0_hk576_hv512
0x107876ff0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h64
0x107877750 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h80
0x107877ad0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h96
0x107877fd0 | th_max = 704 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h112
0x1267dfa30 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h128
0x107878230 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h192
0x107878490 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_hk192_hv128
0x107878ac0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_h256
0x107879830 \mid th_max = 640 \mid th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q5_1_hk576_hv512
0x107879a90 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
```

```
kernel_flash_attn_ext_q8_0_h64
0x1267dfe40 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h80
0x10787a200 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h96
0x10787a960 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h112
0x10787ace0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h128
0x1267e0720 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h192
0x10787b060 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_hk192_hv128
```

```
0x1267e0e80 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_h256
0x1266c3450 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_q8_0_hk576_hv512
0x10787b3e0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_h64
0x10787b640 | th_max = 896 | th_width =
32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h64
                                      (not
supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_h64
0x10787bbb0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_h64
0x10787c130 | th_max = 896 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_h64
0x10787cbb0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_h64
0x1266c39b0 | th_max = 704 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_h64
0x10794e700 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_h96
0x10787d220 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h96
                                       (not
supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_h96
0x1267e1200 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_h96
```

```
0x10787d890 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_h96
0x1267e1870 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_h96
0x1267e1ad0 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_h96
0x104e0aab0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_h128
0x1267e2610 \mid th_max = 896 \mid th_width =
32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h128
(not supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_h128
0x1267e2870 | th_max = 896 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_h128
0x10794ec60 | th_max = 832 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_h128
0x10787df00 | th max = 768 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_h128
0x10787e160 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_h128
0x10794f2f0 | th_max = 896 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_h192
0x1267e33b0 | th_max = 640 | th_width =
32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_h192
(not supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_h192
```

```
0x10794f550 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_h192
0x10787eca0 | th_max = 768 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_h192
0x10787f680 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_h192
0x10787fce0 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_h192
0x107880340 \mid th_max = 768 \mid th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_hk192_hv12
    0x1267e3730 | th max = 768 | th width
= 32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_hk192_hv1
28 (not supported)
```

```
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_hk192_hv1
0x1267e3990 | th_max = 832 |
th width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_hk192_hv1
28 0x1078805a0 | th_max = 832 |
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_hk192_hv1
0x1078809b0 | th_max = 768 |
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_hk192_hv1
0x1267e4160 | th_max = 704 |
th width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_hk192_hv1
0x1266c3ee0 | th_max = 832 |
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_h256
0x1266c4750 | th_max = 576 | th_width =
32
ggml_metal_init: skipping
```

```
kernel_flash_attn_ext_vec_bf16_h256
(not supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_h256
0x1267e49c0 | th_max = 640 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_h256
0x10787f020 | th_max = 576 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_h256
0x1078812b0 | th_max = 512 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_h256
0x1078818e0 | th_max = 512 | th_width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_h256
0x107882050 | th max = 576 | th width =
32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_f16_hk576_hv51
    0x1266c4ad0 | th_max = 576 | th_width
```

```
= 32
ggml_metal_init: skipping
kernel_flash_attn_ext_vec_bf16_hk576_hv5
12 (not supported)
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_0_hk576_hv
512 \quad 0x107882760 \mid th_max = 576 \mid
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q4_1_hk576_hv5
12 0x1078829c0 \mid th_max = 576 \mid
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_0_hk576_hv
512 \quad 0x107883130 \mid th_max = 512 \mid
th width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q5_1_hk576_hv5
12 \quad 0x107883660 \mid th_max = 512 \mid
th_width = 32
ggml_metal_init: loaded
kernel_flash_attn_ext_vec_q8_0_hk576_hv
512 \quad 0x1267e4c20 \mid th_max = 576 \mid
th_width = 32
ggml_metal_init: loaded kernel_set_f32
```

```
0x1267e54f0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_set_i32
0x1267e5750 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_cpy_f32_f32
0x107883c00 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_cpy_f32_f16
0x107884320 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: skipping
kernel_cpy_f32_bf16
                               (not
supported)
ggml_metal_init: loaded kernel_cpy_f16_f32
0x1267e5d00 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_cpy_f16_f16
0x1267e6420 | th_max = 1024 | th_width =
32
ggml_metal_init: skipping
kernel_cpy_bf16_f32
                               (not
supported)
ggml_metal_init: skipping
kernel_cpy_bf16_bf16
                                (not
```

```
supported)
ggml_metal_init: loaded
kernel_cpy_f32_q8_0
0x107884760 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_cpy_f32_q4_0
0x1267e6860 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_f32_q4_1
0x107884d10 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
kernel_cpy_f32_q5_0
0x107885430 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_f32_q5_1
0x1267e6e10 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_f32_iq4_nl
0x1267e7530 | th_max = 1024 | th_width =
32
```

```
ggml_metal_init: loaded
kernel_cpy_q4_0_f32
0x1266c4f10 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q4_0_f16
0x107885870 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q4_1_f32
0x107885f90 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q4_1_f16
0x107886540 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q5_0_f32
0x1267e7970 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q5_0_f16
0x107886980 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded
```

```
kernel_cpy_q5_1_f32
0x1078870a0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q5_1_f16
0x1267e7f20 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q8_0_f32
0x1078874e0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_cpy_q8_0_f16
0x1267e84d0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_concat
0x107887b40 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sqr
0x107888190 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_sqrt
0x1078889a0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sin
```

```
0x1078891b0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_cos
0x1078899c0 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_neg
0x1267e8b20 | th max = 1024 | th width =
32
ggml metal init: loaded kernel reglu
0x1267e8f90 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_geglu
0x10672cc20 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_swiglu
0x10788a130 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_geglu_erf
0x10788a390 \mid th_max = 1024 \mid th_width =
32
ggml_metal_init: loaded kernel_geglu_quick
0x107950360 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_sum_rows
0x10788adb0 | th_max = 1024 | th_width =
```

```
32
ggml_metal_init: loaded kernel_mean
0x10788b010 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded kernel_argmax
0x10788b730 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_pool_2d_avg_f32
0x10788c410 | th_max = 1024 | th_width =
32
ggml_metal_init: loaded
kernel_pool_2d_max_f32
0x10788c970 | th_max = 1024 | th_width =
32
set_abort_callback: call
llama_context: CPU output buffer size =
0.49 MiB
create_memory: n_ctx = 4096 (padded)
llama_kv_cache_unified: layer 0: dev =
Metal
llama_kv_cache_unified: layer 1: dev = Metal
llama_kv_cache_unified: layer 2: dev =
Metal
llama_kv_cache_unified: layer 3: dev =
```

```
Metal
llama_kv_cache_unified: layer 4: dev =
Metal
llama_kv_cache_unified: layer 5: dev =
Metal
llama_kv_cache_unified: layer 6: dev =
Metal
llama_kv_cache_unified: layer 7: dev =
Metal
llama_kv_cache_unified: layer 8: dev =
Metal
llama_kv_cache_unified: layer 9: dev =
Metal
llama_kv_cache_unified: layer 10: dev =
Metal
llama_kv_cache_unified: layer 11: dev =
Metal
llama_kv_cache_unified: layer 12: dev =
Metal
llama_kv_cache_unified: layer 13: dev =
Metal
llama_kv_cache_unified: layer 14: dev =
Metal
llama_kv_cache_unified: layer 15: dev =
Metal
```

```
llama_kv_cache_unified: layer 16: dev =
Metal
llama_kv_cache_unified: layer 17: dev =
Metal
llama_kv_cache_unified: layer 18: dev =
Metal
llama_kv_cache_unified: layer 19: dev =
Metal
llama_kv_cache_unified: layer 20: dev =
Metal
llama_kv_cache_unified: layer 21: dev =
Metal
llama_kv_cache_unified: layer 22: dev =
Metal
llama_kv_cache_unified: layer 23: dev =
Metal
llama_kv_cache_unified: layer 24: dev =
Metal
llama_kv_cache_unified: layer 25: dev =
Metal
llama_kv_cache_unified: layer 26: dev =
Metal
llama_kv_cache_unified: layer 27: dev =
Metal
llama_kv_cache_unified: layer 28: dev =
```

```
Metal
llama_kv_cache_unified: layer 29: dev =
Metal
llama_kv_cache_unified: layer 30: dev =
Metal
llama_kv_cache_unified: layer 31: dev =
Metal
llama_kv_cache_unified: Metal KV buffer
size = 512.00 MiB
llama_kv_cache_unified: size = 512.00 MiB
( 4096 cells, 32 layers, 1 seqs), K (f16):
256.00 MiB, V (f16): 256.00 MiB
llama_kv_cache_unified:
LLAMA_SET_ROWS=0, using old ggml_cpy()
method for backwards compatibility
llama_context: enumerating backends
llama_context: backend_ptrs.size() = 3
llama_context: max_nodes = 65536
llama_context: worst-case: n_tokens = 512,
n_{seqs} = 1, n_{outputs} = 0
graph_reserve: reserving a graph for ubatch
with n_tokens = 512, n_seqs = 1, n_outputs
= 512
graph_reserve: reserving a graph for ubatch
with n_tokens = 1, n_seqs = 1, n_outputs =
```

```
1
graph_reserve: reserving a graph for ubatch
with n_tokens = 512, n_seqs = 1, n_outputs
= 512
llama_context:
                Metal compute buffer size
= 296.00 MiB
llama context:
                  CPU compute buffer size
= 16.01 MiB
llama_context: graph nodes = 1158
llama_context: graph splits = 2
Metal: EMBED_LIBRARY = 1 | CPU: NEON =
1 | ARM_FMA = 1 | FP16_VA = 1 | DOTPROD =
1 | LLAMAFILE = 1 | ACCELERATE = 1 |
REPACK = 1|
Model metadata:
{'general.quantization_version': '2',
'tokenizer.chat_template': "{% set
loop_messages = messages %}{% for
message in loop_messages %}{% set content
= '<|start_header_id|>' + message['role'] +
'<|end_header_id|>\n\n'+
message['content'] | trim + '<|eot_id|>' %}{%
if loop×index0 == 0 %}{% set content =
bos_token + content %}{% endif %}
{{ content }}{% endfor %}{% if
```

```
add_generation_prompt %}{{ '<|
start_header_id|>assistant<|end_header_id|
>\n\n' }}{% endif %}",
'tokenizer.ggml.eos_token_id': '128001',
'tokenizer.ggml.bos_token_id': '128000',
'tokenizer.ggml.model': 'gpt2',
'llama.vocab_size': '128256',
'llama.attention.head_count_kv': '8',
'llama.context_length': '8192',
'llama.attention.head_count': '32',
'general.file_type': '15',
'llama.feed_forward_length': '14336',
'llama.rope.dimension_count': '128',
'llama.rope.freq_base': '500000.000000',
'llama.embedding_length': '4096',
'general.architecture': 'llama',
'llama.attention.layer_norm_rms_epsilon':
'0.000010', 'general.name': 'Meta-
Llama-3-8B-Instruct', 'llama.block_count':
'32'}
Available chat formats from metadata:
chat_template.default
Guessed chat format: Ilama-3
You: hello Jarvis
ggml_metal_graph_compute: command
```

```
buffer 1 failed with status 5
error: Insufficient Memory
(0000008:kIOGPUCommandBufferCallbac
kErrorOutOfMemory)
graph_compute:
ggml_backend_sched_graph_compute_asyn
c failed with error -1
process_ubatch: failed to compute graph,
compute status: -1
decode: removing KV cache entries for
seq_id = 0, pos = [0, +inf)
llama_decode: failed to decode, ret = -3
Traceback (most recent call last):
 File "/Users/andrebaker/llama.cpp/
jarvis_llama.py", line 24, in <module>
  response = Ilm(prompt, max_tokens=256)
 File "/Users/andrebaker/llama.cpp/llama-
voice-env/lib/python3.13/site-packages/
llama_cpp/llama.py", line 1904, in ___call___
  return self.create_completion(
       ~~~~~~~~~~~<mark>^</mark>
    prompt=prompt,
  ...<23 lines>...
    logit_bias=logit_bias,
```

```
File "/Users/andrebaker/llama.cpp/llama-
voice-env/lib/python3.13/site-packages/
llama_cpp/llama.py", line 1837, in
create_completion
 completion: Completion =
next(completion_or_chunks) # type:
ignore
     ^^^^^^
File "/Users/andrebaker/llama.cpp/llama-
voice-env/lib/python3.13/site-packages/
llama_cpp/llama.py", line 1322, in
_create_completion
 for token in self.generate(
   prompt tokens,
 ...<14 lines>...
   grammar=grammar,
   ^^^^^
 ):
```

File "/Users/andrebaker/llama.cpp/llamavoice-env/lib/python3.13/site-packages/ llama_cpp/llama.py", line 914, in generate self.eval(tokens)

~~~~~~~^^^^^

File "/Users/andrebaker/llama.cpp/llama-voice-env/lib/python3.13/site-packages/llama\_cpp/llama.py", line 648, in eval self.\_ctx.decode(self.\_batch)

File "/Users/andrebaker/llama.cpp/llama-voice-env/lib/python3.13/site-packages/llama\_cpp/\_internals.py", line 321, in decode raise RuntimeError(f"llama\_decode returned {return\_code}")

RuntimeError: llama\_decode returned -3 ggml\_metal\_free: deallocating ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0)

ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) ggml\_metal\_mem\_pool\_free: freeing memory pool, num heaps = 0 (total = 0) 

LLaMA server stopped. srv operator(): operator(): cleaning up before exit...

Saving session...ggml\_metal\_free: deallocating

...copying shared history...
...saving history...truncating history files...
...completed.

Deleting expired sessions...none found.

[Process completed]